GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 15, 2004, 15:11:57; Search time 3296.03 Seconds

(without alignments)

10265.033 Million cell updates/sec

Title:

US-10-070-532-5

Perfect score:

Sequence:

1 atggagcctcagccacccc.....tcctgaccatcgtgccccgg 1133

Scoring table:

IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched:

27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters:

55026578

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

EST:*

1: em_estba:*

2: em esthum:*

3: em estin:*

4: em estmu:*

5: em estov:*

6: em estpl:*

7: em estro:*

8: em htc:*

9: gb est1:*

10: gb_est2:*

11: gb_htc:*

12: gb_est3:*

13: gb_est4:*

14: gb_est5:*

15: em estfun:*

16: em estom:*

17: em_gss_hum:*

18: em gss inv:* 19:

em_gss_pln:* 20:

em_gss_vrt:*

21: em_gss_fun:*

22: em_gss_mam:*

23: em_gss_mus:* 24: em_gss_pro:*

25: em gss rod:*

26: em gss_phg:*

27: em_gss vrl:*

28: gb_gss1:* 29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

			용	i			
Re	sult		Query				·
	No.	Score	Match	Length	DB	ID	Description
	1	715.2	63.1	1740	11	BC035686	BC035686 Homo sapi
С	2	701.4	61.9	886	13	BX433093	BX433093 BX433093
. с	3	659.2	58.2	899	13	BX433092	BX433092 BX433092
	4	561.4	49.5	753	29	AY420885	AY420885 Homo sapi
	5	530.4	46.8	3470	11	AK048781	AK048781 Mus muscu
	6	530.4	46.8	3729	11	AK038551	AK038551 Mus muscu
	7	519.8	45.9	1790	11	BC035858	BC035858 Homo sapi
	8	519.4	45.8	3153	11	AK079572	AK079572 Mus muscu
С	- 9	504.4	44.5	790	14	CF147830	CF147830 AGENCOURT
_	10	474.2	41.9	750	29	AY420886	AY420886 Pan trogl
	11	472	41.7	1001	9	AL535838	AL535838 AL535838
	12	468.6	41.4	726	29	AY420887	AY420887 Mus muscu
	13	393.2	34.7	993	12	BM926746	BM926746 AGENCOURT
	14	374.6	33.1	543	13	BX119589	BX119589 BX119589
	15	367	32.4	788	14	CF147829	CF147829 AGENCOURT
	16	329.2	29.1	382	12	BQ042116	BQ042116 sheep1 Sh
С	17	296	26.1	525	12	BI133700	BI133700 UI-M-BH3-
	18	285.4	25.2	635	12	BM939496	BM939496 UI-M-BH3-
	19	278.4	24.6	520	13	BQ269289	BQ269289 ik23f12.y
	20	265.8	23.5	627	10	BB632359	BB632359 BB632359
	21	265.4	23.4	599	12	BM933820	BM933820 UI-M-BH3-
	22	263.2	23.2	611	13	BY723922	BY723922 BY723922
	23	249	22.0	892	13	BX409735	BX409735 BX409735
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	25	202.4	17.9	662	10	BB632883	BB632883 BB632883
С	26	198.4	17.5	625	13	BQ285933	BQ285933 ik23f12.x
	27	198.2	17.5	1073	12	BM920548	BM920548 AGENCOURT
	28	197.6	17.4	505	10	BB651179	BB651179 BB651179
	29	196.8	17.4	245	12	BI976482	BI976482 485407 MA
	30	186.2	16.4	464	13	BY239887	BY239887 BY239887
	31	175.4	15.5	444	14	R55704	R55704 yg88h10.r1
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	33	163.2	14.4	1290	29	AY411591	AY411591 Homo sapi
		≥ 162	14.3	721	29	CE235359	CE235359 tigr-qss-
	35		13.9	1296	29	AY411593	AY411593 Mus muscu
С	36	156.2	13.8	1013	9	AL535837	AL535837 AL535837
	37	147.2	13.0	768	13	BX109847	BX109847 BX109847
	38	133	11.7	257	10	AW427900	AW427900 64510 MAR
С	39	127.2	11.2	1005	28	CC212654	CC212654 CH261-75F
c	40	127.2	11.2	1058	28	CC297061	CC297061 CH261-177
c	41	122.4	10.8	1194	28	CC279941	CC279941 CH261-24C
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	43	119	10.5	1113	29	AY420480	AY420480 Homo sapi
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	45	108.8	9.6	1113	29	AY420481	AY420481 Fan Clogi AY420482 Mus muscu
		100.0	J. 0	1113	2.5	111720402	A1420402 Mus Muscu

ALIGNMENTS

RESULT 1 BC035686 HTC 20-SEP-2002 LOCUS BC035686 1740 bp mRNA linear Homo sapiens, Similar to hypocretin (orexin) receptor 1, clone DEFINITION IMAGE: 5750551, mRNA. ACCESSION BC035686 BC035686.1 GI:23242909 VERSION KEYWORDS HTC. SOURCE Homo sapiens (human) Homo sapiens ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. (bases 1 to 1740) REFERENCE Strausberg, R. AUTHORS Direct Submission TITLE Submitted (31-JUL-2002) National Institutes of Health, Mammalian JOURNAL Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, NIH-MGC Project URL: http://mgc.nci.nih.gov REMARK Contact: MGC help desk COMMENT Email: cgapbs-r@mail.nih.gov Tissue Procurement: Life Technologies, Inc. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC), Gaithersburg, Maryland; Web site: http://www.nisc.nih.gov/ Contact: nisc mgc@nhgri.nih.gov Akhter, N., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S., Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P., Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R., Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C., McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 79 Row: m Column: 17 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4557636 This clone has the following problem: frame shifted. **FEATURES** Location/Qualifiers 1. .1740 source /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /clone="IMAGE:5750551"

/tissue type="Lung, Spleen, fetal, pooled"

/clone_lib="NIH_MGC_122" /lab_host="DH10B" /note="Vector: pCMV-SPORT6"

ORIGIN

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		6; Conservative 0; Mismatches 3; Indels 179; Gaps	1;
Qу	1	ATGGAGCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC	60
Db	506	ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG	565
Qу	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
Db	566	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGCGATTATCTG	625
QУ	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
Db	626		685
Qу	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
Db	686		703
Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	704		703
QУ	301	$\tt CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG$	360
Db	704	·	703
Qу	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	704		746
QУ	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	747		806
QУ	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCTCGCCATCATGGTGCCCCAGGCT	540
Db	807		866
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	867		926
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	927		986
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	987		1046

Qy 7 Db 11 Qy 8 Db 11	47 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 1106 81 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGC 840
Db 11 Qy 8 Db 11	
Db 11	
Qy 9	
-	01 ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Db 12	
Qy 9	61 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Db 12	
Qy 10	21 ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Db 13	
Qy 10	81 CTCAGTGG 1088
Db 14	07 CTCAGTGG 1414
RESULT 2 BX433093/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL COMMENT	BX433093 886 bp mRNA linear EST 15-MAY-2003 BX433093 Homo sapiens FETAL BRAIN Homo sapiens cDNA clone CS0DF013YE04 3-PRIME, mRNA sequence. BX433093 BX433093.1 GI:30779168 EST. Homo sapiens (human) Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 886) Li,W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished (2001) Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

FEATURES source

Location/Qualifiers

1. .886

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"
/clone="CS0DF013YE04"

/tissue type="FETAL BRAIN"

/dev stage="fetal"

/clone lib="Homo sapiens FETAL BRAIN"

/note="Organ: brain; Vector: pCMVSPORT_6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library was not normalized."

0;

ORIGIN

Query Match 61.9%; Score 701.4; DB 13; Length 886; Best Local Similarity 99.0%; Pred. No. 2.8e-136;

Matches 705; Conservative 0; Mismatches 7; Indels 0; Gaps

Qý 377 AGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGT 436

Db 745 AGGCTGTGTCCGTGTCAGTGACAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGT 686

Qy 437 ATGCCATCTGCCACCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCC 496

Db 685 ATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGGGGCCCGTGGCTCCATNC 626

Qy 497 TGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCA 556

Db 625 TGGGCATCTGGCCTGTCGCTGGCCATCATGGTGCCCAGGGCTGCAGTCATGCAATGCA 566

Qy 557 GCAGTGTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCT 616

Db 565 GCAGTGTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCT 506

Qy 677 CCCCACTGGGCCTATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCC 736

Db 445 CCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCC 386

Qy 737 AGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGG 796

Db 385 AGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGG 326

Qy 797 GGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCGCCTTCCTGGCTG 856

Qy 857 AAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCT 916

Db 265 AAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCTGG 206

Qy 917 TCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGA 976

Db 205 TCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGA. 146 977 TGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCCACTGGC 1036 Qy Db 145 TGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCCACTGGC 86 Qу 1037 TGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGG 1088 Db 85 TGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGG 34 RESULT 3 BX433092/c LOCUS BX433092 899 bp mRNA linear EST 15-MAY-2003 DEFINITION BX433092 Homo sapiens FETAL BRAIN Homo sapiens cDNA clone CSODF013YE04 3-PRIME, mRNA sequence. BX433092 ACCESSION BX433092.1 GI:30779167 VERSION KEYWORDS SOURCE Homo sapiens (human) ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE 1 (bases 1 to 899) AUTHORS Li, W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization TITLE JOURNAL Unpublished (2001) COMMENT Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 151.r For more information about this cluster, see http://www.genoscope.cns.fr/ cgi-bin/cluster.cgi?seq=CS0BAI011ZB01 CS00962 1&cluster=151.r. Contact : Feng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ InVitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID: CS0BAI011ZB01 CS00962 1. **FEATURES** Location/Qualifiers 1. .899 source /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /clone="CS0DF013YE04" 3.12 /tissue type="FETAL BRAIN" /dev stage="fetal" /clone lib="Homo sapiens FETAL BRAIN" /note="Organ: brain; Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library was not normalized." ORIGIN

Query Match

58.2%; Score 659.2; DB 13; Length 899;

Matches		3; Conservative 0; Mismatches 40; Indels 1; Gaps	1;
QУ	372	TCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCG	431
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Qу	432	CTGGTATGCCATC-TGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCT	490
Db	678	CTGGTATGCCATCATCCCACCCACTATTGTCAAAGAGCACAGCCCGGCGGGCCCGTGCTC	619
Qу	491	CCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGG	550
Db	618	CCATCCTGGGCATCTGGGCTGTCGCCATCATGGTGCCCCAGGCTGCAGTCATGG	559
Qγ	551	AATGCAGCAGTGTGCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATG	610
Db	558	AATGCAGCAGTGTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATG	499
QУ	611	AACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTTATTGTCACCT	670
Db	498	AACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTTATTGTCACCT	439
QΥ .	671	ACCTGGCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGG	730
Db	438	${\tt ACCTGGCCCACTGGGCCTATTTCCAGATATTCCGCAAGCTCTGGG}$	379
QУ	731	GCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACC	790
Db	378	GCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACC	319
QУ	791	AGCTGGGGGACCTGAGCGGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCCCTTCC	850
Db	318	AGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGCCCGCCC	259
QУ	851	TGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGC	910
Db	258	TGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGC	199
QУ		TGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGT	970
Db		TGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGT	139
ДÀ	971	TCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCC	1030
Db	138	TCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCC	79
QУ	1031	ACTGGCTGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGGAT	1090
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Qy :	1091	GTAAAGAGAAGAGT 1104	
Db	18	ATTCCGGGAGCAGT 5	

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                                  753 bp
                                             DNA
                                                    linear
                                                             GSS 17-DEC-2003
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DEFINITION
           genomic survey sequence.
ACCESSION
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           AY420885.1 GI:39776842
VERSION
KEYWORDS
           GSS.
SOURCE
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           Homo sapiens
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           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
              (bases 1 to 753)
 AUTHORS
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
 TITLE
           Inferring nonneutral evolution from human-chimp-mouse orthologous
           gene trios
  JOURNAL
           Science 302 (5652), 1960-1963 (2003)
  PUBMED
           14671302
REFERENCE
           2 (bases 1 to 753)
 AUTHORS
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
 TITLE
           Direct Submission
  JOURNAL
           Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
           Rockville, MD 20850, USA
COMMENT
           This sequence as made by sequencing genomic exons and ordering them
           based on alignment.
FEATURES
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 Best Local Similarity
                                Pred. No. 5.3e-107;
                        99.8%;
 Matches 562; Conservative
                                  Mismatches
                               0;
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                                                                         0;
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Qу
             **||*||*||
Db
           1 ATGGTGCCCCAGGCTGCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGC 60
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Qу
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          61 ACACGGCTCTTCTCAGTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTAC 120
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Qy
         706 TTCCAGATATTCCGCAAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTG 765
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Db 1	
Qy 7	66 CGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAG 825
Db 2	41 CGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGGGACCTGGAGCAGGGCCTGAGTGGAGAG 300
Qy 8	26 CCCCAGCCCGGGGCCGCCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAG 885
Db 3	01 CCCCAGCCCGGGCCCGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAG 360
Qy 8	86 ACAGCCAAGATGCTGATGGTGGTGCTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGC 945
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	46 GTCCTCAATGTCCTTAAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCT 1005
	21 GTCCTCAATGTCCTTAAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCT 480
	06 GTCTACGCCTGCTTCACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCC 1065
	81 GTCTACGCCTGCTTCACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCC 540
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REFERENCE AUTHORS TITLE JOURNAL MEDLINE PUBMED	Carninci, P. and Hayashizaki, Y. High-efficiency full-length cDNA cloning Meth. Enzymol. 303, 19-44 (1999) 99279253 10349636
REFERENCE AUTHORS TITLE	2 Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to
	• ••
JOURNAL MEDLINE PUBMED REFERENCE	prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) 20499374 11042159

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Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M.,
            Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A.,
            Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K.,
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            Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J.,
            Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y.
            RIKEN integrated sequence analysis (RISA) system--384-format
  TITLE
            sequencing pipeline with 384 multicapillary sequencer
            Genome Res. 10 (11), 1757-1771 (2000)
  JOURNAL
            20530913
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REFERENCE
  AUTHORS
            The RIKEN Genome Exploration Research Group Phase II Team and the
            FANTOM Consortium.
  TITLE
            Functional annotation of a full-length mouse cDNA collection
  JOURNAL
            Nature 409, 685-690 (2001)
REFERENCE
            5
  AUTHORS
            The FANTOM Consortium and the RIKEN Genome Exploration Research
            Group Phase I & II Team.
  TITLE
            Analysis of the mouse transcriptome based on functional annotation
            of 60,770 full-length cDNAs
            Nature 420, 563-573 (2002)
  JOURNAL
REFERENCE
            6 (bases 1 to 3470)
            Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
  AUTHORS
            Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W.,
            Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T.,
            Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Kasukawa, T.,
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            Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N.,
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            Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A.,
            Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Direct Submission
  JOURNAL
            Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
            Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
            URL: http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
            Fax:81-45-503-9216)
COMMENT
            cDNA library was prepared and sequenced in Mouse Genome
            Encyclopedia Project of Genome Exploration Research Group in Riken
            Genomic Sciences Center and Genome Science Laboratory in RIKEN.
            Division of Experimental Animal Research in Riken contributed to
            prepare mouse tissues.
            Please visit our web site for further details.
            URL:http://genome.gsc.riken.go.jp/
            URL:http://fantom.gsc.riken.go.jp/.
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Qу

Db

Qу

Db

Qy

Db

Qy

Db

Qу

Db

Qу

Db

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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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REFERENCE
            Carninci, P. and Hayashizaki, Y.
  AUTHORS
            High-efficiency full-length cDNA cloning
  TITLE
            Meth. Enzymol. 303, 19-44 (1999)
  JOURNAL
  MEDLINE
            99279253
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            10349636
REFERENCE
  AUTHORS
            Carninci, P., Shibata, Y., Hayatsu, N., Suqahara, Y., Shibata, K.,
            Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Normalization and subtraction of cap-trapper-selected cDNAs to
            prepare full-length cDNA libraries for rapid discovery of new genes
  JOURNAL
            Genome Res. 10 (10), 1617-1630 (2000)
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            Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P.,
            Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M.,
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  TITLE
            RIKEN integrated sequence analysis (RISA) system--384-format
            sequencing pipeline with 384 multicapillary sequencer
            Genome Res. 10 (11), 1757-1771 (2000)
  JOURNAL
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            20530913
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REFERENCE
  AUTHORS
            The RIKEN Genome Exploration Research Group Phase II Team and the
            FANTOM Consortium.
  TITLE
            Functional annotation of a full-length mouse cDNA collection
  JOURNAL
            Nature 409, 685-690 (2001)
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  AUTHORS
            The FANTOM Consortium and the RIKEN Genome Exploration Research
            Group Phase I & II Team.
            Analysis of the mouse transcriptome based on functional annotation
  TITLE
            of 60,770 full-length cDNAs
            Nature 420, 563-573 (2002)
  JOURNAL
REFERENCE
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  AUTHORS
            Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P.,
            Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W.,
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            Muramatsu, M. and Hayashizaki, Y.
  TITLE
            Direct Submission
  JOURNAL
            Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
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URL:http://genome.gsc.riken.go.jp/, Tel:81-45-503-9222,
           Fax:81-45-503-9216)
COMMENT
           cDNA library was prepared and sequenced in Mouse Genome
           Encyclopedia Project of Genome Exploration Research Group in Riken
           Genomic Sciences Center and Genome Science Laboratory in RIKEN.
           Division of Experimental Animal Research in Riken contributed to
           prepare mouse tissues.
           Please visit our web site for further details.
           URL:http://genome.gsc.riken.go.jp/
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Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,

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RESULT 7 BC035858

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LOCUS BC035858 1790 bp mRNA linear HTC 04-MAR-2003

DEFINITION Homo sapiens, Similar to hypocretin (orexin) receptor 2, clone

IMAGE: 5767576, mRNA.

ACCESSION BC035858

VERSION BC035858.1 GI:23959160

KEYWORDS HTC.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 1790)

AUTHORS Strausberg, R.
TITLE Direct Submission

JOURNAL Submitted (31-JUL-2002) National Institutes of Health, Mammalian

Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11AO3, Bethesda, MD 20892-2590,

USA

REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov

COMMENT Contact: MGC help desk

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: National Institutes of Health Intramural

Sequencing Center (NISC), Gaithersburg, Maryland;

Web site: http://www.nisc.nih.gov/

Contact: nisc mgc@nhgri.nih.gov

Akhter, N., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,

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Young, A., Zhang, L.-H. and Green, E.D.

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Series: IRAK Plate: 79 Row: p Column: 14

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Location/Qualifiers

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TITLE
            RIKEN integrated sequence analysis (RISA) system--384-format
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            Genome Res. 10 (11), 1757-1771 (2000)
  JOURNAL
  MEDLINE
            20530913
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            11076861
REFERENCE
  AUTHORS
            The RIKEN Genome Exploration Research Group Phase II Team and the
            FANTOM Consortium.
  TITLE
            Functional annotation of a full-length mouse cDNA collection
  JOURNAL
            Nature 409, 685-690 (2001)
REFERENCE
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            The FANTOM Consortium and the RIKEN Genome Exploration Research
            Group Phase I & II Team.
            Analysis of the mouse transcriptome based on functional annotation
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            of 60,770 full-length cDNAs
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            Nature 420, 563-573 (2002)
REFERENCE
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            Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A.,
            Muramatsu, M. and Hayashizaki, Y.
            Direct Submission
  TITLE
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            Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of
            Physical and Chemical Research (RIKEN), Laboratory for Genome
            Exploration Research Group, RIKEN Genomic Sciences Center (GSC),
            RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
            Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp,
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            Fax:81-45-503-9216)
COMMENT
            cDNA library was prepared and sequenced in Mouse Genome
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            Genomic Sciences Center and Genome Science Laboratory in RIKEN.
            Division of Experimental Animal Research in Riken contributed to
            prepare mouse tissues.
            Please visit our web site for further details.
            URL:http://genome.gsc.riken.go.jp/
            URL:http://fantom.gsc.riken.go.jp/.
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           Clone distribution: MGC clone distribution information can be
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                  For information about which gene each clones represents,
                  please visit our anonymous ftp site at
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REFERENCE
             (bases 1 to 750)
 AUTHORS
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
 TITLE
           Inferring nonneutral evolution from human-chimp-mouse orthologous
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           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
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           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
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REFERENCE AUTHORS TITLE JOURNAL	Ξ 5	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1001) Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001)

COMMENT On Feb 13, 2001 this sequence version replaced gi:12799331. Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 151.r For more information about this cluster, see http://www.genoscope.cns.fr/ cgi-bin/cluster.cgi?seq=CSODF013BC02QP1&cluster=151.r. Contact: Feng Liang Email: fliang@lifetech.com URL: http://fulllength.invitrogen.com/ InVitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID: CSODF013BC02QP1. **FEATURES** Location/Oualifiers 1. .1001 source /organism="Homo sapiens" /mol type="mRNA" /db xref="taxon:9606" /clone="CS0DF013YE04" /tissue type="FETAL BRAIN" /dev stage="fetal" /clone lib="Homo sapiens FETAL BRAIN" /note="Organ: brain; Vector: pCMVSPORT_6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library was not normalized." ORIGIN Query Match Score 472; DB 9; Length 1001; 41.7%; Best Local Similarity 92.0%; Pred. No. 3.2e-88; Matches 544; Conservative 13; Mismatches 25; Indels 6; Gaps 377 AGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGT 436 Qу Db 415 AGGCTGTGTCCGTGTCANTGGCAGTGCTAACTCTMANCTTCATCGCMCTGGACCGCTGGT 474 437 ATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCC 496 Qу 1111:[13:[14:[4:4:4:4]]] 475 ATGCHATCTGCYACCCACTATTGTTCAAGARCACGCCGGGGGGCCCGTGGCTCCATCC 534 DЪ 497 TGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCA 556 Qy 535 TNNGNATCTGGGCTNTNTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCA 594 Db 557 GCAGTGTGCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCT 616 Qv Db 595 GCAGTGTGCTGCCTNAGCTANCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCT 654 Qу Db 677 CCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCC 736 Qу

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           1 (bases 1 to 726)
REFERENCE
  AUTHORS
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
           Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
 TITLE
           Inferring nonneutral evolution from human-chimp-mouse orthologous
           gene trios
  JOURNAL
           Science 302 (5652), 1960-1963 (2003)
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REFERENCE
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 AUTHORS
           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
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           Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
           Adams, M.D. and Cargill, M.
           Direct Submission
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           Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
  JOURNAL
           Rockville, MD 20850, USA
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LOCUS
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LOCUS BM926746 993 bp mRNA linear EST 12-MAR-2002 DEFINITION AGENCOURT_6681991 NIH_MGC_121 Homo sapiens cDNA clone IMAGE:5767576 5', mRNA sequence.

ACCESSION BM926746

VERSION BM926746.1 GI:19377125

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
          1 (bases 1 to 993)
REFERENCE
          NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
  TITLE
          National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL
          Unpublished (1999)
COMMENT
          Contact: Robert Strausberg, Ph.D.
          Email: cgapbs-r@mail.nih.gov
          Tissue Procurement: Life Technologies, Inc.
           cDNA Library Preparation: Life Technologies, Inc.
           cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
           DNA Sequencing by: Agencourt Bioscience Corporation
           Clone distribution: MGC clone distribution information can be
           found through the I.M.A.G.E. Consortium/LLNL at:
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                  and male age 26 weeks. Library is oligo-dT primed and
                  directionally cloned (EcoRV site is destroyed upon
                  cloning). Average insert size 1.7 kb, insert size range
                  0.7-3.5 kb. Library is normalized and enriched for
                  full-length clones and was constructed by C. Gruber
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                  this is a NIH MGC Library."
ORIGIN
                       34.7%; Score 393.2; DB 12; Length 993;
 Best Local Similarity 72.1%; Pred. No. 1e-71;
 Matches 512; Conservative
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Heubnerweg 6, D-14059 Berlin, Germany
          Tel: +49 30 32639 101
          Fax: +49 30 32639 111
          www.rzpd.de
          This clone is available royalty-free from RZPD;
          contact RZPD (clone@rzpd.de) for further information. Seq primer:
          M13u, Primer sequence: CGTTGTAAAACGACGGCCAGT.
FEATURES
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                 I - oligo(dT) primer [5'
                 double-stranded cDNA was ligated to Hind III adaptors
                 (Pharmacia), digested with Not I and directionally cloned
                 into the Not I and Hind III sites of the Lafmid BA vector.
                 Library went through one round of normalization. Library
                 constructed by Bento Soares and M. Fatima Bonaldo."
ORIGIN
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 Best Local Similarity 98.7%; Pred. No. 6e-68;
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                          0; Mismatches
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Db

RZPD Deutsches Ressourcenzentrum fuer Genomforschung GmbH

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DEFINITION
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           IMAGE: 6971890 5', mRNA sequence.
ACCESSION
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VERSION
           CF147829.1 GI:33244097
KEYWORDS
           EST.
SOURCE
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           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
               (bases 1 to 788)
REFERENCE
           NIH-MGC http://mgc.nci.nih.gov/.
 AUTHORS
           National Institutes of Health, Mammalian Gene Collection (MGC)
  TITLE
  JOURNAL
           Unpublished (1999)
           Contact: Daniela S. Gerhard, Ph.D.
COMMENT
           Office of Cancer Genomics
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National Cancer Institute / NIH Bldg. 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: GPCR Consortium

cDNA Library Preparation: GPCR Consortium

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be

EST 25-JUL-2003

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: IRBI02 row: a column: 09 High quality sequence start: 9 High quality sequence stop: 772.

FEATURES

Location/Qualifiers

source

1. .788

/organism="Homo sapiens"

/mol type="mRNA" /db xref="taxon:9606" /clone="IMAGE:6971890" /tissue type="mixed" /lab host="DH10B"

/clone lib="NIH MGC 145"

/note Vector: pcDNA3.1; Site 1: varies by clone; Site 2: varies by clone; ORFs were PCR-amplified and cloned into pcDNA3.1 by the GPCR Consortium. Cloning sites vary by clone and include the following: 5'-EcoRV-XmnI/XhoI-3', 5'-EcoRV-XmnI/NotI-3', EcoRV (TA cloned, non-directional). For information about which gene each clones represents, please visit our anonymous ftp site at ftp://image.llnl.gov/image/rearrayed plates/IRBI.preSV.dat

a Note: this is a NIH MGC Library."

ORIGIN

Query Match

32.4%; Score 367; DB 14; Length 788;

		2; Conservative 0; Mismatches 177; Indels 0; Gaps	0;
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°Dh	740		

Search completed: October 15, 2004, 22:50:33 Job time: 3299.03 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 15, 2004, 13:54:41; Search time 4590.56 Seconds

(without alignments)

10697.520 Million cell updates/sec

US-10-070-532-5 Title:

Perfect score: 1133

Sequence: 1 atggagccctcagccacccc.....tcctgaccatcgtgccccgg 1133

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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2: gb_htg:*

3: gb_in:*

4: gb om: *

5: gb ov:*

6: gb pat:*

7: gb ph:*

gb_pl:* 8:

gb_pr:* 9:

10: gb_ro:*

11: gb_sts:*

12: gb_sy:*

13: gb un:*

14: gb vi:*

15: em ba:*

16: em fun:*

em hum:* 17:

18: em in:*

19: em mu:*

20: em om:*

21: em or:*

22: em ov:*

23: em pat:*

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27: em_sts:*

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29: em vi:*
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41:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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6	1114.4	98.4	1116	6	AR216119	AR216119 Sequence
7	1086.4	95.9	1209	6	AR216117	AR216117 Sequence
8	1086.4	95.9	1564	6	E43974	E43974 Novel G pro
. 9	1086.4	95.9	1564	6	E50810	E50810 Novel G pro
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36	514.4	45.4	1805	4	AF164626	AF164626 Canis fam
37	496.2	43.8	597	10	AY255599	AY255599 Mus muscu
38	329.2	29.1	382	4	AF499612	AF499612 Ovis arie
39	304.2	26.8	637	10	AF394597	AF394597 Mus muscu
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ALIGNMENTS

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DEFINITION
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ACCESSION
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VERSION
            E43973.1 GI:18625172
KEYWORDS
            JP 2000106888-A/2.
SOURCE
            unidentified
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REFERENCE
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            Bergsma, D.J. and Ellis, C.E.
  AUTHORS
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  JOURNAL
            Patent: JP 2000106888-A 2 18-APR-2000;
            SMITHKLINE BEECHAM CORP
COMMENT
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                  18-APR-2000
            PF
                  21-JUL-1999 JP 1999206116
            PR
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1. .1133

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Db	301		
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VERSION
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REFERENCE
 AUTHORS
         Bergsma, D.J. and Ellis, C.E.
 TITLE
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         SMITHKLINE BEECHAM CORPORATION (US)
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AUTHORS		Bergsma, D.J. and Ellis, C.E.
TITLE		G-protein coupled receptor (HFGAN72Y)
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SMITHKLINE BEECHAM CORPORATION (US)

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Qy	121 ሞአርርር	AAACAGTATGAG	macamaar	でながないの	ግር ርሳመ አመር ር	הכככשכשכשני מורכי	nccmcc	mcccc	100
Δλ									100
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0.57	301 00000	AGCCT CTGGTG	ሮ እ ሮ እ ሞ ሮ እ (~~~ 7 ~~~~	n C C C m C m r	nacaaanna	CCMCM	CCAAC	2 753
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AR216119

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DEFINITION Sequence 5 from patent US 6410701.

ACCESSION AR216119

VERSION AR216119.1 GI:23314432

KEYWORDS

SOURCE Unknown. ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1116)

Soppet, D.R., Li, Y. and Rosen, C.A. AUTHORS

TITLE

Human neuropeptide receptor

JOURNAL

Patent: US 6410701-A 5 25-JUN-2002;

FEATURES

Location/Qualifiers

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LOCUS AX299473

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linear

DNA

PAT 26-NOV-2001

DEFINITION Sequence 1 from Patent EP1154019.

ACCESSION AX299473

VERSION

AX299473.1 GI:17129230

KEYWORDS

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REFERENCE
 AUTHORS
         Bergsma, D.J. and Ellis, C.E.
 TITLE
         G-protein coupled receptor (hfgan72x)
         Patent: EP 1154019-A 1 14-NOV-2001;
 JOURNAL
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REFERENCE AUTHORS	-	l [']	
TITLE		Bergsma, D.J. and Ellis, C.E. G-protein coupled receptor (hfgan72x)	
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REFERENCE
 AUTHORS
          Burmer, G.C., Roush, C.L. and Brown, J.P.
          Antigenic peptides, such as for G protein-coupled receptors
 TITLE
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 JOURNAL
          Patent: WO 02061087-A 367 08-AUG-2002;
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          Bergsma, D.J. and Ellis, C.E.
 AUTHORS
 TITLE
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REFERENCE
 AUTHORS
          Eulenberg, K., Steuernagel, A., Haeder, T. and Broenner, G.
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Search completed: October 15, 2004, 19:59:40
Job time: 4593.56 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 15, 2004, 13:52:46; Search time 483.963 Seconds

(without alignments)

9945.416 Million cell updates/sec

Title: US-10-070-532-5

Perfect score: 1133

Sequence: 1 atggagccctcagccacccc.....tcctgaccatcgtgccccgg 1133

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3373863 segs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: N_Geneseq 29Jan04:*

1: geneseqn1980s:*

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9: geneseqn2003cs:*

10: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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     A new nucleic acid encoding a human neuropeptide receptor polypeptide,
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     useful for preventing, treating or ameliorating obesity, narcolepsy,
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     Claim 4; Fig 3; 385pp; English.
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     described. The neuropeptide receptor shows sequence homology to the
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     neuropeptide Y receptor. Polypeptides and polynucleotides of the
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     neuropeptide receptor are useful for diagnosing, preventing, or treating
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     a pathological condition in a subject related to the central nervous and
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     peripheral nervous systems (CNS and PNS). The polypeptides and
CC
     polynucleotides may be used to treat hyperproliferative, cardiovascular,
CC
     autoimmune, nervous system or infectious disorders e.g. cancer, heart
CC
     disease, rheumatoid arthritis, Alzheimer's disease, HIV infection and
CC
     diabetes mellitus. In particular they are useful for preventing, treating
CC
     or ameliorating a medical condition in a mammal such as obesity/eating
CC
     behaviour disorders, narcolepsy, neurological disease, addiction to
CC
     narcotics, nicotine and alcohol, chronic pain, acute pain, migraine
     headaches and anxiety disorders. The polynucleotides encoding the
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CC
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CC
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    P-PSDB; AAW06126.
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РΤ
    Human neuro-peptide receptor polypeptide(s) - used to identify
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PT antagonists and agonists to such polypeptide(s), e.g. in the treatment of obesity, Alzheimer's disease, epilepsy, etc. PTXX PSDisclosure; Page 52; 77pp; English. XX CC The sequence encodes human neuropeptide receptor splice variant-2, which CC retains activity corresponding to the mature receptor (encoded by CC AAT42826). The receptor gene has been isolated from from a human adult CC hypothalamus cDNA library, and is structurally related to the G-protein-CC coupled receptor family. The receptor may be used in a drug screening CC assay for isolation of receptor-agonists and -antagonists, which may be CC used as anorectic, antitumour, anticholesterolemic, neuroprotective, CC anticonvulsant, hypotensive or sedative drugs, etc. The DNA may also be CC used in genetic disease diagnosis or gene therapy. The receptor and its CC corresponding antibody may also be used in therapy and diagnosis XX SQ Sequence 1133 BP; 202 A; 368 C; 312 G; 251 T; 0 U; 0 Other; Query Match 99.9%; Score 1131.4; DB 2; Length 1133; Pred. No. 4.5e-263; Best Local Similarity 99.9%; Matches 1132; Conservative 0: Mismatches 1; Indels 0; Gaps 0; 1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60 Qу Db 1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGACCCC 60 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Qу 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Db 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC 180 Qy 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 Db 181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240 Qу 181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240 Db 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Qу Db 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 301 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 Qу Db 301 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Qу 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Db 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 Qу Db 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 540 Qу

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                 961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
                        1.4 | | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
                 961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Db
               1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
QУ
                        Db
               1021 ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
               1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
Qу
                        Db
               1081 CTCAGTGGATGTAAAGAGAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
RESULT 3
```

AAV68512

XX

XX

XX

ID AAV68512 standard; cDNA; 1133 BP.

AC AAV68512;

XX

DT 29-JAN-1999 (first entry)

DE Nucleotide sequence of HGS EST 557082.

KW HGS EST 557082; G-protein coupled receptor family; HFGAN72Y; mutation; probe; agonist; antagonist; activation; inhibition; gene therapy; KW KW antibody; immune response; Vaccine; HIV-1; HIV-2; cancer; anorexia; bulimia; asthma; Parkinson's disease; acute heart failure; hypotension; KW KW hypertension; urinary retention; osteoporosis; angina pectoris;

```
KW
     myocardial infarction; ulcer; allergies; psychotic disorder;
KW
     neurological disorder; gene mapping; ss.
XX
os
     Homo sapiens.
XX
PN
     EP875565-A2.
XX
PD
     04-NOV-1998.
XX
ΡF
     27-OCT-1997;
                    97EP-00308554.
XX
PR
     30-APR-1997;
                    97US-00846705.
XX
PΑ
     (SMIK ) SMITHKLINE BEECHAM CORP.
XX
ΡI
     Bergsma DJ, Ellis C;
XX
DR
     WPI; 1998-570286/49.
XX
РΤ
     New G-protein coupled receptor HFGAN72Y polypeptide and polynucleotide -
РΤ
     useful as diagnostic reagents and for prevention and treatment of HIV
PT
     infections, cancer, osteoporosis and Parkinson's disease.
XX
PS
     Example 1; Page 18-19; 22pp; English.
XX
CC
     This is the nucleotide sequence of the HGS EST 557082 used in the method
CC
     of the invention involving the G-protein coupled receptor, HFGAN72Y. Its
     polypeptides and polynucleotides are useful for diagnosing susceptibility
CC
CC
     to diseases by detecting mutations in the HFGAN72Y gene using probes
CC
     containing the HFGAN72Y nucleotide sequence, and can diagnose diseases
CC
     associated with HFGAN72Y imbalance by determining HFGAN72Y polypeptide or
     mRNA expression levels. Agonists/antagonists can be used in treatment to
CC
CC
     activate/inhibit HFGAN72Y activity, in addition to direct administration
CC
     of antisense sequences to prevent expression, or HFGAN72Y polypeptides to
CC
     treat conditions associated with a lack HFGAN72Y protein. Gene therapy
     may also be used to affect endogenous HFGAN72Y polypeptide production.
CC
CC
     HFGAN72Y antibodies are useful for inducing an immune response to
CC
     immunise and prevent diseases, and for isolating HFGAN72Y clones or
CC
     purifying the polypeptides by affinity chromatography. HFGAN72Y
CC
     polypeptides can be administered directly or as a vaccine to inoculate
CC
     against diseases. Diseases diagnosed, prevented or treated include HIV-1
CC
     or HIV-2 infections, pain, cancers, anorexia, bulimia, asthma,
CC
     Parkinson's disease, acute heart failure, hypotension, hypertension,
CC
     urinary retention, osteoporosis, angina pectoris, myocardial infarction,
     ulcers; allergies, benign prostatic hypertrophy, and psychotic and
CC
CC
     neurological disorders. The HFGAN72Y polypeptide is also useful for
CC
     mapping the gene to a chromosome, allowing gene inheritance to be studied
CC
     through linkage analysis.
XX
SO
     Sequence 1133 BP; 202 A; 366 C; 314 G; 251 T; 0 U; 0 Other;
                                  Score 1131.4; DB 2; Length 1133;
                          99.9%;
  Best Local Similarity
                          99.9%; Pred. No. 4.5e-263;
 Matches 1132; Conservative
                                 0; Mismatches
                                                   1;
                                                        Indels
                                                                      Gaps
                                                                              0;
```

	Db	1	ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG	60
	Qy .	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
	Db	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
	Qу	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
	Db	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
	Qу	181	CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
	Db	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
	Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
	Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
	Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
	Db	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
	Qy	361	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
	Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
	Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
	Db	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
	Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
	Db	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
	Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
	Db	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
	Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
- 1%	Db	661	ATTGTCACCTACCTGGCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
	Qу	721	AAGCTCTGGGGCCGCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
	Db	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
	Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
	Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGCCCCAGCCCCGGGGC	840
	Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
	Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900

```
901 ATGGTGGTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qy.
            Db
         901 ATGGTGGTGCTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
         961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
            Db
         961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
        1021 ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
            Db
        1021 ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Qу
        1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
             Db
        1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
RESULT 4
ABA96020
    ABA96020 standard; cDNA; 1133 BP.
XX
AC
    ABA96020;
XX
    12-MAR-2002 (first entry)
DT
XX
DE.
    HGS EST 557082.
XX
    G-protein; receptor; HFGAN72Y; cytostatic; cardiant; analgesic; cancer;
KW
KW
    nootropic; tranquillising; neuroprotective; anti-asthmatic; gene therapy;
ΚW
    infection; HIV-1; pain; anorexia; bulimia; Parkinson's disease; ulcer;
    cardiac disease; urinary retention; asthma; allergy; psychotic disorder;
KW
KW
    benign prostatic hypertrophy; neurological disorder; anxiety; delirium;
KW
    schizophrenia; manic depression; dementia; mental retardation; EST;
KW
    dyskinesia; Huntington's disease; Tourette's syndrome; HIV-2;
KW
    HGS EST 557082; expressed sequence tag; ss.
XX
OS
    Homo sapiens.
XX
PN
    EP1156110-A2.
XX
PD
    21-NOV-2001.
XX
PF
    27-OCT-1997; 2001EP-00203010.
XX
PR
    30-APR-1997;
                  97US-00845705.
PR
    27-OCT-1997;
                 97EP-00308554.
XX
PA
    (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PΙ
    Bergsma DJ, Ellis CE;
XX
DR
    WPI; 2002-084320/12.
XX
PΨ
    New polynucleotide encoding a G-protein coupled receptor designated
PT
    HFGAN72Y is useful to diagnose and treat associated diseases including
PT
    cancer, infection, cardiac disease and psychotic and neurological
```

```
PT
    disorders.
XX ...
PS
    Example 1; Page 18-19; 22pp; English.
XX
    The sequence represents HGS EST 557082. The invention relates to a novel
CC
CC
    isolated polynucleotide encoding HFGAN72Y polypeptide. The polypeptide of
CC
    the invention has cytostatic, cardiant, analgesic, tranquillising,
CC
    nootropic, neuroprotective, and anti-asthmatic activity. The HFGAN72Y has
CC
    a use in gene therapy. The HFGAN72Y polynucleotide or an HFGAN72Y
    polypeptide agonist are used to treat a subject in need of enhanced
CC
CC
    HFGAN72Y activity or expression. An HFGAN72Y antagonist or competitor, or
CC
    nucleic acid which inhibits HFGAN72Y expression is used to treat a
CC
    subject in need of decreased HFGAN72Y activity or expression. HFGAN72Y-
CC
    associated diseases include infections, particularly by HIV-1 or HIV-2,
CC
    pain, anorexia, bulimia, Parkinson's disease, cardiac diseases, cancers,
CC
    ulcers, urinary retention, asthma, allergies, benign prostatic
    hypertrophy, and psychotic and neurological disorders including anxiety,
CC
CC
    schizophrenia, manic depression, delirium, dementia, severe mental
CC
    retardation and dyskinesias such as Huntington's disease and Tourette's
CC
    syndrome
XX
SO
    Sequence 1133 BP; 202 A; 366 C; 314 G; 251 T; 0 U; 0 Other;
                      99.98;
                             Score 1131.4; DB 6;
 Best Local Similarity
                      99.9%; Pred. No. 4.5e-263;
 Matches 1132; Conservative
                            0: Mismatches
                                               Indels
                                                                  0;
                                                           Gaps
Qу
          1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
            1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
Db
         61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
            61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Db
        121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Qу
            121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Db
        181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qу
            181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Db
        241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
            Db
        241 ACCAACTACTTCATTGTCAACCTGTCCCTGCCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qy
        301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
            Db
        301 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
        361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
Qу
            361 GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
Db
        421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480
Qу
```

Db	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCATCATGGTGCCCCAGGCT	540
Db	481		540
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541		600
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	601		660
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCATGGCCTATTTCCAGATATTCCGC	720
Db	661		720
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Qу	781	$\tt CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC$	840
Db	781		840
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Qу	1021	ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Db	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Qу	1081	CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133	
Db	1081	CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133	
AAV6			
ID XX	AAV68511	standard; cDNA; 1170 BP.	
AC XX	AAV68511;		
DT XX	29-JAN-19	999 (first entry)	
DE XX	Nucleotic	de sequence of HFGAN72Y a G-protein coupled receptor.	

XX

KW G-protein coupled receptor family; HFGAN72Y; mutation; probe; agonist; KW antagonist; activation; inhibition; gene therapy; antibody; KW immune response; vaccine; HIV-1; HIV-2; cancer; anorexia; bulimia; KW asthma; Parkinson's disease; acute heart failure; hypotension; KW hypertension; urinary retention; osteoporosis; angina pectoris; KW myocardial infarction; ulcer; allergies; psychotic disorder; KW neurological disorder; gene mapping; ss. XXOS Homo sapiens. XX FHKey Location/Qualifiers FTCDS 1. .1170 FT/*tag= aFT/product= "HFGAN72Y protein" XX PNEP875565-A2. XX PD 04-NOV-1998. XX PF 27-OCT-1997; 97EP-00308554. XX PR 30-APR-1997; 97US-00846705. XX PA (SMIK) SMITHKLINE BEECHAM CORP. XX PΙ Bergsma DJ, Ellis C; XX DR WPI; 1998-570286/49. DR P-PSDB; AAW80805. XX PТ New G-protein coupled receptor HFGAN72Y polypeptide and polynucleotide -PTuseful as diagnostic reagents and for prevention and treatment of HIV PTinfections, cancer, osteoporosis and Parkinson's disease. XX PS Claim 3; Page 7; 22pp; English. XX CC This is the nucleotide sequence of the G-protein coupled receptor, CC HFGAN72Y used in the method of the invention. HFGAN72Y polypeptides and CC polynucleotides are useful for diagnosing susceptibility to diseases by CC detecting mutations in the HFGAN72Y gene using probes containing the CC HFGAN72Y nucleotide sequence, and can diagnose diseases associated with

HFGAN72Y imbalance by determining HFGAN72Y polypeptide or mRNA expression levels. Agonists/antagonists can be used in treatment to activate/inhibit HFGAN72Y activity, in addition to direct administration of antisense sequences to prevent expression, or HFGAN72Y polypeptides to treat conditions associated with a lack HFGAN72Y protein. Gene therapy may also be used to affect endogenous HFGAN72Y polypeptide production. HFGAN72Y antibodies are useful for inducing an immune response to immunise and prevent diseases, and for isolating HFGAN72Y clones or purifying the polypeptides by affinity chromatography. HFGAN72Y polypeptides can be administered directly or as a vaccine to inoculate against diseases. Diseases diagnosed, prevented or treated include HIV-1 or HIV-2 infections, pain, cancers, anorexia, bulimia, asthma, Parkinson's disease, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, ulcers; allergies, benign prostatic hypertrophy, and psychotic and neurological disorders. The HFGAN72Y polypeptide is also useful for mapping the gene

CC

```
to a chromosome, allowing gene inheritance to be studied through linkage
CC
   analysis
XX
SQ
   Sequence 1170 BP; 208 A; 381 C; 322 G; 259 T; 0 U; 0 Other;
 Query Match
                   99.6%;
                         Score 1128.2; DB 2; Length 1170;
 Best Local Similarity
                   99.7%;
                         Pred. No. 2.7e-262;
 Matches 1130; Conservative
                           Mismatches
                                      3;
                                         Indels
                                                0;
                                                         0;
                                                   Gaps
Qу
         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
          Db
         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
Qγ
        61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Db
Qу
       121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
          121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Db
       181 CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qy
          181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACACATGAGGACAGTC 240
Db
       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
          Db
       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
       301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
Qу
          301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
Db
       361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
Qу
          361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
Db
       421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480
Qу
          421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480
Db
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCATCATGGTGCCCCAGGCT 540
Qy
          481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
Db
       541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACAGGGCTCTTCTCA 600
Qy
          541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600
Db
       601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660
Qу
          601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660
Db
       661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720
Qу
          661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720
Db
```

```
Qу
        721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780
           Db
        721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780
        781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Qу
           781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Db
        841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAGACAGCCAAGATGCTG 900
Qу
           Db
        841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 900
        901 ATGGTGGTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
           901 ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Db
      961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
           Db
        961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
       1021 ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Qу
           1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Db
       1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
Qу
           Db
       1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGCTCTGTCCTGCCCATCGTGCCCCGG 1133
RESULT 6
ABA96019
ID
    ABA96019 standard; cDNA; 1170 BP.
XX
AC
    ABA96019;
XX
DΤ
    12-MAR-2002 (first entry)
XX
DΕ
    G-protein coupled receptor (HFGAN72Y) cDNA.
XX
    G-protein; receptor; HFGAN72Y; cytostatic; cardiant; analgesic; cancer;
ΚW
KW
    nootropic; tranquillising; neuroprotective; anti-asthmatic; gene therapy;
    infection; HIV-1; pain; anorexia; bulimia; Parkinson's disease; ulcer;
KW
    cardiac disease; urinary retention; asthma; allergy; psychotic disorder;
ĸw
    benign prostatic hypertrophy; neurological disorder; anxiety; delirium;
KW
    schizophrenia; manic depression; dementia; mental retardation;
KW
    dyskinesia; Huntiliqton's disease; Tourette's syndrome; HIV-2; ss.
KW
XX
OS
    Homo sapiens.
XX
FH
                 Location/Qualifiers
    Key
                 1. .1170
FΤ
    CDS
FT
                 /*tag= a
FT
                 /product= "HGFAN72Y"
XX
ΡN
    EP1156110-A2.
XX
PΝ
    21-NOV-2001.
```

```
XX
PF
    27-OCT-1997; 2001EP-00203010.
XX
PR
    30-APR-1997;
                  97US-00846705.
                  97EP-00308554.
PR
    27-OCT-1997:
XX
PA
     (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PΙ
    Bergsma DJ, Ellis CE;
XX
DR
    WPI; 2002-084320/12.
DR
    P-PSDB; ABB08208.
XX
PT
    New polynucleotide encoding a G-protein coupled receptor designated
PT
    HFGAN72Y is useful to diagnose and treat associated diseases including
PΤ
    cancer, infection, cardiac disease and psychotic and neurological
PT
    disorders.
XX
    Claim 3; Page 7; 22pp; English.
PS
XX
CC
    The sequence encodes G-protein coupled receptor HFGAN72Y. The invention
CC
    relates to a novel isolated polynucleotide encoding HFGAN72Y polypeptide.
CC
    The polypeptide of the invention has cytostatic, cardiant, analgesic,
CC
    tranquillising, nootropic, neuroprotective, and anti-asthmatic activity.
CC
    The HFGAN72Y has a use in gene therapy. The HFGAN72Y polynucleotide or an
CC
    HFGAN72Y polypeptide agonist are used to treat a subject in need of
CC
    enhanced HFGAN72Y activity or expression. An HFGAN72Y antagonist or
CC
    competitor, or nucleic acid which inhibits HFGAN72Y expression is used to
CC
    treat a subject in need of decreased HFGAN72Y activity or expression.
CC
    HFGAN72Y-associated diseases include infections, particularly by HIV-1 or
CC
    HIV-2, pain, anorexia, bulimia, Parkinson's disease, cardiac diseases,
    cancers, ulcers, urinary retention, asthma, allergies, benign prostatic
CC
CC
    hypertrophy, and psychotic and neurological disorders including anxiety,
CC
    schizophrenia, manic depression, delirium, dementia, severe mental
CC
    retardation and dyskinesias such as Huntington's disease and Tourette's
CC
    syndrome
XX
SO
    Sequence 1170 BP; 208 A; 381 C; 322 G; 259 T; 0 U; 0 Other;
 Query Match
                        99.6%;
                               Score 1128.2; DB 6; Length 1170;
 Best Local Similarity
                       99.7%;
                               Pred. No. 2.7e-262;
 Matches 1130; Conservative
                              0; Mismatches
                                              3;
                                                  Indels
                                                           0;
                                                                      0;
                                                               Gaps
Qy
           1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
             Db
           1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
Qy
          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
             61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Db
         121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Qy
             Db
         121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
         181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qy
```

Db	181	$\tt CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC$	240
Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Qy		CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db		CCGGCCAGCCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Qу	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
QΥ	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db .	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Db	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCATCATGGTGCCCCAGGCT	540
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660 .
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Qу		CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db		CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCTGCACGGAGGAAGACAGCCAAGATGCTG	900
Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	961	${\tt AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC}$	1020
Qy 1	L021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Db 1	1021	ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCCATCATCTACAACTTC	1080

```
Qу
         1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133
              1081 CTCAGTGGATGTAAAGAGAAGAGTCTAGCTCTGTCCTGCCCATCGTGCCCCGG 1133
Db
RESULT 7
AAV63468
ΙD
    AAV63468 standard; cDNA; 1564 BP.
XX
AC
    AAV63468;
XX
DΤ
     26-JAN-1999 (first entry)
XX
DE
     cDNA encoding G-protein coupled receptor (HFGAN72X) polypeptide.
XX
KW
     G-protein coupled receptor; HFGAN72X; HIV infection; anorexia; cancer;
KW
    bulimia; asthma; Parkinson's disease; acute heart failure;
KW
     urinary retention; osteoporosis; angina pectoris; myocardial infarction;
KW
    benign prostatic hypertrophy; neurological disorder; ss.
XX
os
     Homo sapiens.
XX
FH
     Key
                    Location/Qualifiers
FT
     CDS
                     154. .1431
                     /*tag= a
FT
FT
                    /product= "HFGAN72X"
XX
PN
     EP875566-A2.
XX
PD
     04-NOV-1998.
XX
PF
     27-OCT-1997;
                   97EP-00308563.
XX
PR
     30-APR-1997;
                   97US-00846704.
XX
PΑ
     (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PΙ
     Bergsma DJ,
                 Ellis CE;
XX
DR
     WPI: 1998-559432/48.
DR
     P-PSDB; AAW80456.
XX
PT
     New human G-protein coupled receptor HFGAN72X polypeptide and
     polynucleotide - useful as diagnostic reagents and for treating e.g. HIV
PΨ
PT
     infection, cancer and Parkinson's disease.
XX
PS
     Claim 3; Page 7; 24pp; English.
XX
CC
     The present sequence encodes a G-protein coupled receptor (HFGAN72X)
CC
     polypeptide. HFGAN72X polypeptides and polynucleotides are useful for
CC
     diagnosing diseases related to over or under expression of HFGAN72X
CC
     proteins by identifying mutations in the HFGAN72X gene using HFGAN72X
CC
     probes, or determining HFGAN72X protein or mRNA expression levels.
CC
     HFGAN72X polypeptides are also useful for screening for compounds which
CC
     affect activity of the protein. Diseases that can be treated with
```

HFGAN72X include HIV infections, pain, anorexia, cancers, bulimia,

```
asthma, Parkinson's disease, acute heart failure, hypotension,
CC
   hypertension, urinary retention, osteoporosis, angina pectoris,
   myocardial infarction, ulcers, allergies, benign prostatic hypertrophy,
CC
CC
   and psychotic and neurological disorders
XX
   Sequence 1564 BP; 271 A; 511 C; 435 G; 347 T; 0 U; 0 Other;
SQ
                   95.98;
                         Score 1086.4; DB 2;
                                         Length 1564;
 Query Match
                   99.9%;
                         Pred. No. 3.6e-252;
 Best Local Similarity
 Matches 1087; Conservative
                         0;
                           Mismatches
                                      1;
                                         Indels
                                                 0:
                                                    Gaps
                                                          0;
         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
Qу
          154 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 213
Db
        61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
          214 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 273
Db
       121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTCGCC 180
Qу
          274 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 333
Db
       181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qy
          334 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 393
Db
       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
          394 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 453
Db
       301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
Qу
          454 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 513
Db
       361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
Qу
          514 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 573
Db
       421 GCCTGGACCGCTGGTATGCCATCTGCCACCACTATTGTTCAAGAGCACAGCCCGGCGG 480
Qу
          574 GCCTGGACCGCTGGTATGCCATCTGCCACCACTATTGTTCAAGAGCACAGCCCGGCGG 633
Db
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
Qу
          634 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 693
Db
       541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600
Qу
          694 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 753
Db
       601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660
Qy
           754 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 813
Db
        661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720
Qу
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814 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 873
Db
        721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780
Qy
           874 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 933
Db
        781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Qy
           934 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 993
Db
        841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAGACAGCCAAGATGCTG 900
Qy
           994 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 1053
Db
        901 ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
           1054 ATGGTGGTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 1113
Db
        961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qy
           1114 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1173
Db
       1021 ACCTTCTCCCACTGGCTGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Qу
           1174 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1233
Db
       1081 CTCAGTGG 1088
Qy
           1111111
Db
       1234 CTCAGTGG 1241
RESULT 8
AAV68514
ID
    AAV68514 standard; cDNA; 1564 BP.
XX
AC
    AAV68514;
XX
DT
    29-JAN-1999
              (first entry)
XX
DE
    Nucleotide sequence of a probe HGS EST 554692.
XX
KW
    Probe HGS EST 554692; G-protein coupled receptor family; HFGAN72Y;
KW
    mutation; probe; agonist; antagonist; activation; inhibition;
    qene therapy; antibody; immune response; vaccine; HIV-1; HIV-2; cancer;
KW
    anorexia; bulimia; asthma; Parkinson's disease; acute heart failure;
KW
KW
    hypotension; hypertension; urinary Tetention; osteoporosis;
    angina pectoris; myocardial infarction; ulcer; allergies;
KW
    psychotic disorder; neurological disorder; gene mapping; ss.
KW
XX
OS
    Synthetic.
    Homo sapiens.
OS
XX
PN
    EP875565-A2.
XX
PD
    04-NOV-1998.
XX
PF
    27-OCT-1997;
                97EP-00308554.
```

```
XX
PR
    30-APR-1997;
                  97US-00846705.
XX
    (SMIK ) SMITHKLINE BEECHAM CORP.
PΑ
XX
PΙ
    Bergsma DJ,
                 Ellis C;
XX
DR
    WPI; 1998-570286/49.
XX
PT
    New G-protein coupled receptor HFGAN72Y polypeptide and polynucleotide -
PT
    useful as diagnostic reagents and for prevention and treatment of HIV
    infections, cancer, osteoporosis and Parkinson's disease.
PT
XX
    Example 1; Page 19-20; 22pp; English.
PS
XX
    This is the nucleotide sequence of the probe HGS EST 554692 used in the
CC
    method of the invention involving the G-protein coupled receptor,
CC
    HFGAN72Y. Its polypeptides and polynucleotides are useful for diagnosing
CC
CC
    susceptibility to diseases by detecting mutations in the HFGAN72Y gene
    using probes containing the HFGAN72Y nucleotide sequence, and can
CC
CC
    diagnose diseases associated with HFGAN72Y imbalance by determining
CC
    HFGAN72Y polypeptide or mRNA expression levels. Agonists/antagonists can
    be used in treatment to activate/inhibit HFGAN72Y activity, in addition
CC
CC
    to direct administration of antisense sequences to prevent expression, or
CC
    HFGAN72Y polypeptides to treat conditions associated with a lack HFGAN72Y
CC
    protein. Gene therapy may also be used to affect endogenous HFGAN72Y
CC
    polypeptide production. HFGAN72Y antibodies are useful for inducing an
CC
    immune response to immunise and prevent diseases, and for isolating
CC
    HFGAN72Y clones or purifying the polypeptides by affinity chromatography.
CC
    HFGAN72Y polypeptides can be administered directly or as a vaccine to
CC
    inoculate against diseases. Diseases diagnosed, prevented or treated
CC
    include HIV-1 or HIV-2 infections, pain, cancers, anorexia, bulimia,
CC
    asthma, Parkinson's disease, acute heart failure, hypotension,
CC
    hypertension, urinary retention, osteoporosis, angina pectoris,
    myocardial infarction, ulcers; allergies, benign prostatic hypertrophy,
CC
CC
    and psychotic and neurological disorders. The HFGAN72Y polypeptide is
CC
    also useful for mapping the gene to a chromosome, allowing gene
CC
    inheritance to be studied through linkage analysis
XX
    Sequence 1564 BP; 269 A; 508 C; 436 G; 347 T; 0 U; 4 Other;
SQ
                        95.9%;
                                Score 1086.4; DB 2; Length 1564;
 Query Match
                        99.9%;
  Best Local Similarity
                                Pred. No. 3.6e-252;
 Matches 1087; Conservative
                               0;
                                  Mismatches
                                                    Indels
                                                                         0;
           1 ATGGAGCCTCAGCCACCCAGGGGCCCAGATGGGGGTCCCCCTGGCAGCAGAGAGCCC 60
Qy.
             154 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 213
Db
          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
             Db
         214 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 273
        .121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC 180
Qу
             Db
         274 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTCGTCGTCGCC 333
```

QΥ	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACACATGAGGACAGTC	240
Db	334		393
Qy	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	394	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	453
Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db	454		513
Qу	361	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	514		573
Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	574		633
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCCCCATCATGGTGCCCCAGGCT	540
Db	634		693
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	694		753
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	754		813
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
Dp.	814		873
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874		933
Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	934		993
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	994	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	1053
Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	1054		1113
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	1114		1173
Qу	1021	ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080

```
Db
         1174 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1233
         1081 CTCAGTGG 1088
Qy
              1111111
Db
         1234 CTCAGTGG 1241
RESULT 9
AAF32103
ΙD
    AAF32103 standard; cDNA; 1564 BP.
XX
AC
    AAF32103;
XX
DT
     10-APR-2001 (first entry)
XX
DE
     Human HFGAN72 receptor coding sequence SEQ ID NO: 12.
XX
KW
     Human; mouse; rat; Lig72A; Lig72B; neuropeptide receptor; HFGAN72;
KW.
     truncation mutant; ligand; neurodegenerative disorder; pain;
KW
     eating disorder; behaviour disorder; mood disorder; ss.
XX
     Homo sapiens.
OS
XX
PN
    WO200100787-A2.
XX
PD
     04-JAN-2001.
XX
     22-JUN-2000; 2000WO-US017251.
PF
XX
PR
     25-JUN-1999;
                   99US-0141156P.
XX
PA
     (SMIK ) SMITHKLINE BEECHAM CORP.
PΑ
     (SMIK ) SMITHKLINE BEECHAM PLC.
XX
PΙ
     Bingham S, Darker J, Liu W, Martin JD, Parsons AA, Patel SR;
XX
DR
    WPI; 2001-071483/08.
XX
PT
     Polynucleotides encoding Lig 72A polypeptides or their variants, which
PT
     are useful in the treatment of a disease or disorder associated with
PT
     pain, e.g. enhanced or exaggerated sensitivity to pain, hyperalgesia,
PT
    neuropathic pain and back pain.
XX
PS
     Disclosure; Fig 6; 101pp; English.
XX
CC
     The present invention provides the protein and coding sequences for the
CC
     human, mouse and rat HFGAN receptor ligand Lig72A. It also provides
     truncated mutant versions. These, and their agonists and antagonists, are
CC
CC
     all useful in the treatment of eating, neurodegenerative, behaviour,
CC
    mood, sexual, hormonal and sleep disorders, pain, depression, epilepsy
CC
     and acute inflammatory conditions
XX
SO
     Sequence 1564 BP; 271 A; 511 C; 435 G; 347 T; 0 U; 0 Other;
  Query Match
                         95.9%; Score 1086.4; DB 4; Length 1564;
```

99.9%; Pred. No. 3.6e-252;

Best Local Similarity

ľ	Matches	1087	; Conservative	0;	Mismatches	1;	Indels	0;	Gaps	0;
Qу		1	ATGGAGCCCTCAGCCAC							60
Db		154	ATGGAGCCCTCAGCCAC							213
Qу		61	TCCCCTGTGCCTCCAGA							120
Db		214	TCCCCTGTGCCTCCAGA							273
Qу		121	TACCCAAAACAGTATGA							180
Db		274	TACCCAAAACAGTATGA							333
QУ		181	CTGGTGGGCAACACGCT							240
Db		334	CTGGTGGGCAACACGCT							393
Qу		241	ACCAACTACTTCATTGT							300
Db		394	ACCAACTACTTCATTGT							453
QУ		301	CCGGCCAGCCTGCTGGT							360
Db		454	CCGGCCAGCCTGCTGGT	GGACA'	TCACTGAGTCCT	GGCTGT'	TCGGCCATGO	CCTC	TGCAAG	513
QУ		361	GTCATCCCCTATCTACA							420
Db			GTCATCCCCTATCTACA							
Qу			GCCCTGGACCGCTGGTA	11111						
Db			GCCCTGGACCGCTGGTA							
QΆ			GCCCGTGGCTCCATCCT(11111			шшш		111111	
Db			GCCCGTGGCTCCATCCT							
QУ		541	GCAGTCATGGAATGCAG							600
Db			GCAGTCATGGAATGCAG						,	
QУ		601	GTCTGTGATGAACGCTG							660
Db		754	GTCTGTGATGAACGCTG		ATGACCTCTATC	CCAAGA'	TCTACCACAG	3TTGC	TTCTTT	813
QУ		661	ATTGTCACCTACCTGGC							720
Db		814	ATTGTCACCTACCTGGC	CCCAC:	TGGGCCTCATGG	CCATGG	CCTATTTCCA	\GATA	TTCCGC	873
QУ		721	AAGCTCTGGGGCCGCCA							780
Db		874	AAGCTCTGGGGCCGCCA	GATCC(CCGGCACCACCT	CAGCAC'	TGGTGCGGAA	ACTGG.	AAGCGC	933
Qу		781	CCCTCAGACCAGCTGGG							840
Db		934	CCCTCAGACCAGCTGGG	GGACC'	I'GGAGCAGGGCC'	TGAGTG	GAGAGCCCC	4GCCC	CGGGGC	993

```
Qу
         841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG .900
            Db
         994 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 1053
        901 ATGGTGGTGCTGCTGCTCTCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
            Db
        1054 ATGGTGGTGCTGCTGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 1113
        961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
            1114 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1173
Db
Qу
       1021 ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
            1174 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1233
Db
       1081 CTCAGTGG 1088
Qу
            Db
       1234 CTCAGTGG 1241
RESULT 10
ABA96021
    ABA96021 standard; cDNA; 1564 BP.
XX
AC
    ABA96021;
XX
DT
    12-MAR-2002 (first entry)
XX
    HGS EST 554692.
DE
XX
KW
    G-protein; receptor; HFGAN72Y; cytostatic; cardiant; analgesic; cancer;
KW
    nootropic; tranquillising; neuroprotective; anti-asthmatic; gene therapy;
    infection; HIV-1; pain; anorexia; bulimia; Parkinson's disease; ulcer;
KW
KW
    cardiac disease; urinary retention; asthma; allergy; psychotic disorder;
KW
    benign prostatic hypertrophy; neurological disorder; anxiety; delirium;
KW
    schizophrenia; manic depression; dementia; mental retardation; EST;
    dyskinesia; Huntington's disease; Tourette's syndrome; HIV-2;
KW
KW
    HGS EST 554692; expressed sequence tag; probe; ss.
XX
OS
    Homo sapiens.
XX
PN
    EP1156110-A2.
XX
PD
    21-NOV-2001.
XX
PF
    27-OCT-1997; 2001EP-00203010.
XX
PR
    30-APR-1997;
                 97US-00846705.
PR
    27-OCT-1997;
                 97EP-00308554.
XX
PA
    (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PΙ
    Bergsma DJ, Ellis CE;
XX
    WPI; 2002-084320/12.
DR
```

XX PT PT

New polynucleotide encoding a G-protein coupled receptor designated HFGAN72Y is useful to diagnose and treat associated diseases including cancer, infection, cardiac disease and psychotic and neurological disorders.

PT XX PS

PT

Example 1; Page 19-20; 22pp; English.

CC XX

CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC

The sequence represents HGS EST 554692. The sequence was used in the invention as a probe to screen a human genomic placenta phage library. The invention relates to a novel isolated polynucleotide encoding HFGAN72Y polypeptide. The polypeptide of the invention has cytostatic, cardiant, analgesic, tranquillising, nootropic, neuroprotective, and anti -asthmatic activity. The HFGAN72Y has a use in gene therapy. The HFGAN72Y polynucleotide or an HFGAN72Y polypeptide agonist are used to treat a subject in need of enhanced HFGAN72Y activity or expression. An HFGAN72Y antagonist or competitor, or nucleic acid which inhibits HFGAN72Y expression is used to treat a subject in need of decreased HFGAN72Y activity or expression. HFGAN72Y-associated diseases include infections, particularly by HIV-1 or HIV-2, pain, anorexia, bulimia, Parkinson's disease, cardiac diseases, cancers, ulcers, urinary retention, asthma, allergies, benign prostatic hypertrophy, and psychotic and neurological disorders including anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation and dyskinesias such as Huntington's disease and Tourette's syndrome

CC XX SQ

Sequence 1564 BP; 269 A; 508 C; 436 G; 347 T; 0 U; 4 Other;

Query Match 95.9%; Score 1086.4; DB 6; Length 1564; Best Local Similarity 99.9%; Pred. No. 3.6e-252; Matches 1087; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60 Qу Db 154 ATGGAGCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 213 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Qу 214 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 273 Db 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 Qу 274 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTTCGTCGTGGCC 333 Db 181 CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240 Qv Db 334 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 393 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Qv Db 394 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 453 Qy 301 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 454 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 513 Db 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Qy

Db	514		573
Qу	421	GCCCTGGACCGCTGTATGCCATCTGCCACCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	574	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	633
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCTCGCTGGCCATCATGGTGCCCCAGGCT	540 .
Db	634	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	693
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	694	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	753
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	754	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	813
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	814	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	873
Qy	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
Qу	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	934	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	993
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	994	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	1053
Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	1054	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	1113
Qy	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	1114	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1173
Qу	1021	ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
DF	1174	ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1233
QУ	1081	CTCAGTGG 1088	
Db	1234	CTCAGTGG 1241	

RESULT 11

AAI64173

ID AAI64173 standard; cDNA; 1564 BP.

XX

AC AAI64173;

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XX
DT
     22-JAN-2002 (first entry)
XX
DE
     HFGAN72X G coupled receptor polypeptide partial sequence.
XX
KW
     Antibacterial; fungicide; virucide; protozoacide; anti-HIV; analgesic;
KW
     cytostatic; nootropic; antiparkinsonian; cardiant; antiulcer;
KW
     antiasthmatic; tranquiliser; neuroleptic; antidepressant; anticonvulsant;
KW
     osteopathic; HIV infection; pain; cancer; anorexia; bulimia;
KW
     Parkinson's disease; acute heart failure; hypotension; hypertension;
     urinary retention; osteoporosis; angina pectoris; probe;
KW
KW
     myocardial infarction; ulcers; asthma; allergy; delirium; dementia;
KW
     benign prostatic hypertrophy; anxiety; schizophrenia; manic depression;
     dyskinesia; G coupled receptor; HFGAN72X; 7 transmembrane receptor; ss.
KW
XX
OS
     Homo sapiens.
XX
FH
     Key
                     Location/Qualifiers
FT
     CDS
                     154. .1362
FT
                     /*tag= a
FT
                     /partial
FT
                     /product= "HFGAN72X protein"
                     /note= "The specification states that this is a partial
FT
FT
                     sequence even though it contains start and stop codons;
FT
                     HFGAN72X is a G coupled receptor polypeptide"
FT
                     /transl except= (pos:991. .993, aa:Ala)
XX
PN
     EP1154019-A2.
XX
PD
     14-NOV-2001.
XX
PF
     27-OCT-1997; 2001EP-00203008.
XX
PR
     30-APR-1997;
                    97US-00846704.
PR
     27-OCT-1997;
                    97EP-00308563.
XX
PA
     (SMIK ) SMITHKLINE BEECHAM CORP.
XX
ΡI
     Bergsma DJ,
                 Ellis CE;
XX
DR
     WPI; 2002-012659/02.
DR
     P-PSDB; AAG78346.
XX
PT
     Nucleic acid encoding the HFGAN72X receptor, useful for diagnosis and
     treatment of e.g. infections, cancer, anorexia, bulimia, Parkinson's
PT
     disease, and acute Meart failure.
XX
PS
     Example 3; Page 9; 24pp; English.
XX
CC
     The present sequence is that of a known partial nucleotide sequence
CC
     encoding a HFGAN72X polypeptide (AAG78346) used as a probe to identify
CC
     the HFGAN72X gene (AAI64173). The specification describes a newly
CC
     isolated polynucleotide encoding a human HFGAN72X G coupled receptor
CC
     polypeptide. The protein of the invention has antibacterial, fungicide,
CC
     virucide, protozoacide, anti-HIV, cardiant, analgesic, cytostatic,
CC
     nootropic, antiparkinsonian, antiulcer, antiasthmatic, tranquiliser,
     neuroleptic, antidepressant, anticonvulsant and osteopathic activities.
```

```
HFGAN72X polynucleotides (PNs) are used to express HFGAN72X in vivo, to
CC
CC
     treat diseases requiring increased activity or expression of HFGAN72X;
CC
     for recombinant production of HFGAN72X; diagnose diseases by detecting
CC
     mutations in genomic sequences and in chromosome identification and
CC
     mapping. HFGAN72X polypeptides are used to raise specific antibodies; as
CC
     therapeutic agents; to identify HFGAN72X protein-expressing clones; to
CC
     purify HFGAN72X proteins; in vaccines. Cells transformed with HFGAN72X
CC
     PNs are used to identify (ant)agonists of HFGAN72X, useful
CC
     therapeutically. Nucleic acids that inhibit expression of HFGAN72X and
CC
     polypeptides that compete with ligands for binding to HFGAN72X proteins
CC
     are also useful therapeutically and diagnostically. HFGAN72X-related
CC
     diseases include infections (bacterial, viral, fungal or protozoal,
CC
     particularly HIV-1 or -2); pain; cancer; anorexia; bulimia; Parkinson's
CC
     disease; acute heart failure; hypotension; hypertension; urinary
CC
     retention; osteoporosis; angina pectoris; myocardial infarction; ulcers;
CC
     asthma; allergy; benign prostatic hypertrophy; anxiety; schizophrenia;
CC
     manic depression; delirium; dementia; severe mental retardation and
CC
     dyskinesias
XX
```

SQ Sequence 1564 BP; 269 A; 508 C; 436 G; 347 T; 0 U; 4 Other;

```
Query Match 95.9%; Score 1086.4; DB 6; Length 1564; Best Local Similarity 99.9%; Pred. No. 3.6e-252; Matches 1087; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

Qу	1	ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC	60
Db	154	ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG	213
Qу	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
Db	214	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	273
Qу	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC	180
Db	274	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC	333
Qу	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
Дb	334	CTGGTGGCCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	393
Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	394	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	453
Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db	454	CCGGCCAGCCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	513
Qу	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	514	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	573
Qу	421	GCCCTGGACCGCTGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	574	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	633

```
Qу
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
          Db
       634 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 693
       541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600
Qу
          Db
       694 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 753
       601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660
Qу
          Db
       754 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 813
       661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720
Qy
          Db
       814 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 873
       721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780
Qу
          Db
       874 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 933
       781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Qу
          Db
       934 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 993
Qy
       841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 900
          994 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 1053
Db
       901 ATGGTGGTGCTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
          1054 ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 1113
Db
       961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
          Db
      1114 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1173
      1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Qу
          1174 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1233
Db
      1081 CTCAGTGG 1088
Qy
          Db
      1234 CTCAGTGG 1241
RESULT 12
AAI64172
ID
   AAI64172 standard; cDNA; 1564 BP.
XX
AC
   AAI64172;
XX
DT
   22-JAN-2002
             (first entry)
XX
DE
   Human HFGAN72X G coupled receptor polypeptide cDNA.
XX
KW
   Antibacterial; fungicide; virucide; protozoacide; anti-HIV; analgesic;
```

cytostatic; nootropic; antiparkinsonian; cardiant; antiulcer;

KW

KW antiasthmatic; tranquiliser; neuroleptic; antidepressant; anticonvulsant; KW osteopathic; HIV infection; pain; cancer; anorexia; bulimia; KW Parkinson's disease; acute heart failure; hypotension; hypertension; KW urinary retention; osteoporosis; angina pectoris; myocardial infarction; KW ulcers; asthma; allergy; delirium; dementia; KW benign prostatic hypertrophy; anxiety; schizophrenia; manic depression; KW dyskinesia; G coupled receptor; HFGAN72X; 7 transmembrane receptor; ss. XX OS Homo sapiens. XXFHKey Location/Qualifiers FTCDS 154. .1431 FT/*tag= a/product= "HFGAN72X protein" FT/note= "G coupled receptor polypeptide" FT XX PNEP1154019-A2. XX PD14-NOV-2001. XX 27-OCT-1997; 2001EP-00203008. PF XXPR 30-APR-1997; 97US-00846704. PR 27-OCT-1997; 97EP-00308563. XX PA(SMIK) SMITHKLINE BEECHAM CORP. XX PIBergsma DJ, Ellis CE; XX DR WPI; 2002-012659/02. DR P-PSDB; AAG78345. XX PT Nucleic acid encoding the HFGAN72X receptor, useful for diagnosis and PTtreatment of e.g. infections, cancer, anorexia, bulimia, Parkinson's PTdisease, and acute heart failure. XX PS Claim 3; Page 7; 24pp; English. XX CC The present sequence is that of a cDNA encoding a HFGAN72X polypeptide CC · (AAG78345). The specification describes a newly isolated polynucleotide CC encoding a HFGAN72X G coupled receptor polypeptide. The protein of the CC invention has antibacterial, fungicide, virucide, protozoacide, anti-HIV, CCcardiant, analgesic, cytostatic, nootropic, antiparkinsonian, antiulcer, CCantiasthmatic, tranquiliser, neuroleptic, antidepressant, anticonvulsant CC and osteopathic activities. HFGAN72X polynucleotides (PNs) are used to CC express HFGAN72X in vivo, to treat diseases requiring increased activity CC or expression of HFGAN72X; for recombinant production of HFGAN72X; CC diagnose diseases (or susceptibility to them) by detecting mutations in CC genomic sequences and in chromosome identification and mapping. HFGAN72X CC polypeptides are used to raise specific antibodies; as therapeutic agents CC ; to identify HFGAN72X protein-expressing clones; to purify HFGAN72X CC proteins; in vaccines. Cells transformed with HFGAN72X PNs are used to CC identify (ant)agonists of HFGAN72X, useful therapeutically. Nucleic acids CC that inhibit expression of HFGAN72X and polypeptides that compete with CC ligands for binding to HFGAN72X proteins are also useful therapeutically CC and diagnostically. HFGAN72X-related diseases include infections

(bacterial, viral, fungal or protozoal, particularly HIV-1 or -2); pain;

```
cancer; anorexia; bulimia; Parkinson's disease; acute heart failure;
    hypotension; hypertension; urinary retention; osteoporosis; angina
CC
CC
    pectoris; myocardial infarction; ulcers; asthma; allergy; benign
CC
    prostatic hypertrophy; anxiety; schizophrenia; manic depression; delirium
CC
    ; dementia; severe mental retardation and dyskinesias
XX
SQ
    Sequence 1564 BP; 271 A; 511 C; 435 G; 347 T; 0 U; 0 Other;
 Query Match
                    95.9%; Score 1086.4; DB 6; Length 1564;
 Best Local Similarity
                    99.98;
                          Pred. No. 3.6e-252;
 Matches 1087; Conservative
                         0;
                           Mismatches
                                                            0;
                                          Indels
                                                     Gaps
Qу
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           Db
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        61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
           Db
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Qу
           Db
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Qу
           Db
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       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
           394 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 453
Db
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Qу
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Db
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Qу
           574 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 633
Db
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCTCGCCTGGCCATCATGGTGCCCCAGGCT 540
Qy
           634 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 693
Db
Qу
       541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600
           Db
       694 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 753
       601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660
Qy
           Db
       754 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 813
       661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720
Qу
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814 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 873
Db
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Qу
           874 AAGCTCTGGGGCCGCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 933
Db
        781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Qу
           934 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 993
Db
        841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 900
Qу
           994 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 1053
Db
        901 ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
           1054 ATGGTGGTGCTGGTCTTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 1113
Db
        961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
Qу
           1114 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1173
Db
       1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
Qу
           1174 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1233
Db
       1081 CTCAGTGG 1088
Qу
           Db
       1234 CTCAGTGG 1241
RESULT 13
ABZ42789
ID
    ABZ42789 standard; DNA; 1564 BP.
XX
AC
    ABZ42789;
XX
DT
    04-MAR-2003 (first entry)
XX
DE
    Human orexin receptor 1 nucleotide SEQ ID NO:367.
XX
KW
    G protein-coupled receptor; GPCR; antigenic peptide; gene therapy;
    G protein-coupled receptor modulator; antibody; immune-related disease;
KW
KW
    growth-related disease; cell regeneration-related disease; AIDS; cancer;
KW
    immunological-related cell proliferative disease; autoimmune disease;
KW
    Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy;
KW
    osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes;
KW
    graft versus host disease; Parkinson's disease; multiple sclerosis; pain;
KW
    psoriasis; anxiety; depression; schizophrenia; dementia; memory loss;
KW
    mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea;
KW
    hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
KW
    ulcer; gene; ds.
XX
```

os

XX

Homo sapiens.

WO200261087-A2.

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XX
PD
     08-AUG-2002.
XX
PF
     19-DEC-2001; 2001WO-US050107.
XX
PR
     19-DEC-2000; 2000US-0257144P.
XX
PA
     (LIFE-) LIFESPAN BIOSCIENCES INC.
XX
PΙ
     Burmer GC,
                Roush CL,
                           Brown JP;
XX
DR
     WPI; 2003-046718/04.
     P-PSDB; ABP81941.
DR
XX
PT
     New isolated antigenic peptides e.g., for G protein-coupled receptors
PT
     (GPCR), useful for diagnosing and designing drugs for treating conditions
PT
     in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
     autoimmune diseases.
PT
XX
PS
     Disclosure; Fig 1; 523pp; English.
XX
CC
     The present invention describes antigenic peptides (I) comprising: (a)
CC
     any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino
CC
     acids. Also described: (1) an assay for the detection of a particular G
CC
     protein-coupled receptor (GPCR) or a candidate polypeptide in a sample;
CC
     and (2) an isolated antibody having high specificity and high affinity or
CC
     avidity for a particular GPCR. (I) can be used as GPCR modulators and in
CC
     gene therapy. The antigenic peptides for GPCRs are useful in detecting an
CC
     antibody against a particular GPCR, and in the production of specific
CC
     antibodies. The peptides and antibodies are also useful for detecting the
CC
     presence or absence of corresponding GPCRs. The antigenic peptides for
CC
     GPCRs and antibodies are useful for diagnosing and designing drugs for
CC
     treating immune-related diseases, growth-related diseases, cell
CC
     regeneration-related disease, immunological-related cell proliferative
CC
     diseases, or autoimmune diseases, e.g. AIDS, Alzheimer's disease,
CC
     atherosclerosis, bacterial, fungal, protozoan or viral infections,
     osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute
CC
CC
     inflammation, allergies, Crohn's disease, diabetes, graft versus host
CC
     disease, Parkinson's disease, multiple sclerosis, pain, psoriasis,
CC
     anxiety, depression, schizophrenia, dementia, mental retardation, memory
CC
     loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension,
CC
    hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or
CC
     any other disorder in which GPCRs are involved. The antibodies may be
CC
     used in immunoassays and immunodiagnosis. ABZ42523 to ABZ42869 encode
CC
     GPCR proteins given in ABP81675 to ABP82018, which are used in the
CU
     exemplification of the present invention
XX
SO
     Sequence 1564 BP; 268 A; 513 C; 436 G; 347 T; 0 U; 0 Other;
  Query Match
                         95.9%;
                                 Score 1086.4; DB 7; Length 1564;
  Best Local Similarity
                         99.98;
                                 Pred. No. 3.6e-252;
  Matches 1087; Conservative
                                0; Mismatches
                                                      Indels
                                                                    Gaps
                                                                            0;
Qу
            1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCTGGCAGCAGAGAGCCC 60
              Db
          154 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 213
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QУ		61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
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Qу	~	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
Db		274	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	333
QУ		181	CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
Db		334	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACACATGAGGACAGTC	393
Qу		241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db		394	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	453
Qу		301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db		454	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	513
Qу		361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db		514	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	573
QУ		421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db		574	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	633
QУ		481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Db		634	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	693
QУ		541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	× .	694	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	753
QУ		601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db		754	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	813
Qу		661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db		814	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	873
Qу		721	AAGCTCTGGGGCCGCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db		874	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
Qу		781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db		934		993
QУ	. •	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db		994		1053
Qу		901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960

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Db
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Qу
             Db
        1114 AAGAGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1173
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        1081 CTCAGTGG 1088
Qу
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        1234 CTCAGTGG 1241
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RESULT 14
AAT42827
    AAT42827 standard; cDNA; 1110 BP.
XX
AC
    AAT42827;
XX
DT
    22-FEB-1997 (first entry)
XX
DE
    Neuropeptide receptor splice variant-1 gene.
XX
KW
    Human; neuropeptide receptor; splice variant; drug screening;
KW
    receptor-agonist; receptor-antagonist; anorectic; antitumour;
KW
    anticholesterolemic; neuroprotective; anticonvulsant; hypotensive;
    sedative; diagnostic; gene therapy; ss.
KW
XX
OS
    Homo sapiens.
XX
PN
    WO9634877-A1.
XX
PD
    07-NOV-1996.
XX
PF
    05-MAY-1995;
                  95WO-US005616.
XX
PR
    05-MAY-1995;
                  95WO-US005616.
XX
PA
    (HUMA-) HUMAN GENOME SCI INC.
XX
PI
    Soppet DR, Li Y, Rosen CA;
XX
    WPI; 1996-506094/50.
DR
DR
    P-PSDB; AAW06125.
XX
    Human neuro-peptide receptor polypeptide(s) - used to identify
PT
PT
    antagonists and agonists to such polypeptide(s), e.g. in the treatment of
РΤ
    obesity, Alzheimer's disease, epilepsy, etc.
XX
PS
    Disclosure; Page 50-51; 77pp; English.
XX
CC
    The sequence encodes human neuropeptide receptor splice variant-1, which
    retains activity corresponding to the mature receptor (encoded by
CC
    AAT42826). The receptor gene has been isolated from from a human adult
```

```
CC
   hypothalamus cDNA library, and is structurally related to the G-protein-
CC
    coupled receptor family. The receptor may be used in a drug screening.
CC
    assay for isolation of receptor-agonists and -antagonists, which may be
CC
   used as anorectic, antitumour, anticholesterolemic, neuroprotective,
    anticonvulsant, hypotensive or sedative drugs, etc. The DNA may also be
CC
CC
   used in genetic disease diagnosis or gene therapy. The receptor and its
CC
    corresponding antibody may also be used in therapy and diagnosis
XX
SO
    Sequence 1110 BP; 194 A; 364 C; 305 G; 247 T; 0 U; 0 Other;
 Query Match
                    95.7%;
                           Score 1084.8; DB 2; Length 1110;
 Best Local Similarity
                           Pred. No. 7.9e-252;
                    99.8%;
 Matches 1086; Conservative
                          0; Mismatches
                                        2;
                                           Indels
                                                       Gaps
                                                             0;
Qy
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           Db
         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
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           121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Db
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Qу
           Db
        181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
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QУ
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           301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
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Qy
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Qу
           421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480
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Db
Qу
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Qу
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601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660

Db

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        721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780
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           Db
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        781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Qу
           781 CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC 840
Db
        841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 900
Qy
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Db
        901 ATGGTGGTGCTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT 960
Qу
           901 ATGGTGGTGCTGCTCTCCCCTCTGCTACCTCCCCATCAGCGTCCTCAATGTCCTT 960
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           961 AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC 1020
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           Db
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RESULT 15
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XX
AC
   AAS00491;
XX
DT
    17-MAY-2001 (first entry)
XX
DE
    Human neuropeptide receptor cDNA.
XX
KW
    Human; neuropeptide receptor; neuropeptide Y receptor; obesity;
    nervous system disorder; hyperproliferative disorder; diabetes mellitus;
KW
KW
    cardiovascular disorder; autoimmune disorder; infectious disorder;
KW
    eating behaviour disorder; narcolepsy; neurological disease;
KW
    narcotics addiction; nicotine addiction; alcohol addiction; gene therapy;
KW
    protein co-ordinate data; chromosome 1; ss.
XX
OS
    Homo sapiens.
XX
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FH
    Key
FT
    CDS
                 1. .1278
FΤ
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FT
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XX
ΡN
    WO200117532-A1.
XX
PD
    15-MAR-2001.
XX
    07-SEP-2000; 2000WO-US024518.
PF
XX
PR
    10-SEP-1999;
                  99US-00393696.
XX
PA
    (HUMA-) HUMAN GENOME SCI INC.
XX
PI
    Soppet DR, Li Y, Rosen CA;
XX
DR
    WPI; 2001-183276/18.
DR
    P-PSDB; AAU00438.
XX
PT
    A new nucleic acid encoding a human neuropeptide receptor polypeptide,
PT
    useful for preventing, treating or ameliorating obesity, narcolepsy,
PТ
    neurological disease and addiction to narcotics, nicotine and alcohol.
XX
PS
    Claim 4; Fig 1; 385pp; English.
XX
CC
    The present sequence encodes for a novel human neuropeptide receptor
CC
    which shows sequence homology to the neuropeptide Y receptor. Two splice
CC
    variants of the neuropeptide receptor (AAU00439-AAU00440) and a possible
CC
    mutant (AAU00442) are also described. Polypeptides and polynucleotides of
CC
    the neuropeptide receptor are useful for diagnosing, preventing, or
CC
    treating a pathological condition in a subject related to the central
CC
    nervous and peripheral nervous systems (CNS and PNS). The polypeptides
    and polynucleotides may be used to treat hyperproliferative,
CC
    cardiovascular, autoimmune, nervous system or infectious disorders e.g.
CC
CC
    cancer, heart disease, rheumatoid arthritis, Alzheimer's disease, HIV
CC
    infection and diabetes mellitus. In particular they are useful for
CC
    preventing, treating or ameliorating a medical condition in a mammal such
CC
    as obesity/eating behaviour disorders, narcolepsy, neurological disease,
CC
    addiction to narcotics, nicotine and alcohol, chronic pain, acute pain,
CC
    migraine headaches and anxiety disorders. The polynucleotides encoding
CC
    the neuropeptide receptor can also be used in gene therapy methods for
CC
    treating such diseases
XX
SO
    Sequence 1278 BP; 220 A; 426 C; 347 G; 285 T; 0 U; 0 Other;
                        95.7%;
 Query Match
                                Score 1084.8; DB 4; Length 1278;
                        99.8%;
 Best Local Similarity
                                Pred. No. 8.2e-252;
 Matches 1086; Conservative
                               0;
                                  Mismatches
                                                    Indels
                                                             0;
                                                                 Gaps
                                                                         0;
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Qу
             1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
Db
          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
             Db
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         121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Qy
             121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC 180
Db
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Db	181	CTGGTGGCCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
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Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
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QУ	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Qу	421	GCCCTGGACCGCTGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
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Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
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Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
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Qу ,	•	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCTGCACGGAGGAAGACAGCCAAGATGCTG	900
Qу	901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db		ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	
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. 4		
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Dh	1001	
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Search completed: October 15, 2004, 16:01:47 Job time: 485.963 secs

123

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OM nucleic - nucleic search, using sw model

Run on: October 15, 2004, 15:25:17; Search time 88.8123 Seconds

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7079.645 Million cell updates/sec

Title: US-10-070-532-5

Perfect score: 1133

Sequence: 1 atggagccctcagccacccc.....tcctgaccatcgtgccccgg 1133

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	1128.2	99.6	1170	. 2	US-08-846-705-1	Sequence 1, Appli
4	1114.4	98.4	1116	4	US-08-462-509B-5	Sequence 5, Appli
5	1086.4	95.9	1209	4	US-08-462-509B-1	Sequence 1, Appli
6	1086.4	95.9	1564	2	US-08-846-705-4	Sequence 4, Appli
7	1086.4	95.9	1564	3	US-08-846-704-1	Sequence 1, Appli
8	1086.4	95.9	1564	3	US-08-846-704-3	Sequence 3, Appli
9	1084.8	95.7	1110	4	US-08-462-509B-3	Sequence 3, Appli
10	1081.6	95.5	1209	5	PCT-US95-05616-1	Sequence 1, Appli

11	1076.8	95.0	1110	5	PCT-US95-05616-3	Company 2 Ammli
12	697.6	61.6		3	US-08-513-974B-375	Sequence 3, Appli
13	670.6	59.2	789	3	US-08-513-974B-55	Sequence 375, App
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15	520.8	46.0	1633	3	US-09-119-788-1	Sequence 55, Appl
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24	119	10.5	1331	3	US-08-776-971-103	Sequence 103, App
25	108.8	9.6	669	3	US-08-513-974B-314	Sequence 314, App
26	108.8	9.6	669	3	US-08-776-971-99	Sequence 99, Appl
27	108.8	9.6	1113	3	US-09-172-353-1	Sequence 1, Appli
28	108.8	9.6	1113	4	US-09-799-955-1	Sequence 1, Appli
29	103.2	9.1	1110	4	US-09-170-496D-25	Sequence 25, Appl
30	103.2	9.1	1110	4	US-09-170-496D-177	Sequence 177, App
31	103.2	9.1	1344	4	US-09-016-434-1295	Sequence 1295, Ap
32	103.2	9.1	1356	1	US-07-978-892A-4	Sequence 4, Appli
33	103.2	9.1	1535	4	US-09-016-434-1051	Sequence 1051, Ap
34	103.2	9.1	1969	1	US-07-937-609-28	Sequence 28, Appl
35	103.2	9.1	1969	3	US-08-029-170-28	Sequence 28, Appl
36	100	8.8	2243	1	US-07-937-609-15	Sequence 15, Appl
37	100	8.8	2243	3	US-08-029-170-15	Sequence 15, Appl
38	98.4	8.7	1621	1	US-08-722-001-13	Sequence 13, Appl
39	98.4	8.7	1776	1	US-08-722-001-29	Sequence 29, Appl
40	98.4	8.7	2002	4	US-09-016-434-1172	Sequence 1172, Ap
41	98.4	8.7	2140	1	US-08-334-698-1	Sequence 1, Appli
42	98.4	8.7	2140	1	US-08-228-932-1	Sequence 1, Appli
43	98.4	8.7	2140	1	US-08-468-939-1	Sequence 1, Appli
44	98.4	8.7	2140	2	US-08-406-855A-1	Sequence 1, Appli
45	98.4	8.7	2140	2	US-08-722-190-1	Sequence 1, Appli

ALIGNMENTS

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RESULT 1
US-08-846-705-3
; Sequence 3, Application US/08846705
; Patent No. 5935814
  GENERAL INFORMATION:
    APPLICANT: BERGSMA, DERK J.
    APPLICANT: ELLIS, CATHERINE E
    TITLE OF INVENTION: NOVEL G-PROTEIN COUPLED
    NUMBER OF SEQUENCES: 5
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: RATNER & PRESTIA
      STREET: P.O. BOX 980
      CITY: VALLEY FORGE
      STATE: PA
      COUNTRY: USA
      ZIP: 19482
    COMPUTER READABLE FORM:
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MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/846,705
      FILING DATE: 30-APR-1997
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
     NAME: PRESTIA, PAUL F
     REGISTRATION NUMBER: 23,031
     REFERENCE/DOCKET NUMBER: GH-70003
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: 610-407-0700
     TELEFAX: 610-407-0701
     TELEX: 846169
  INFORMATION FOR SEO ID NO: 3:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 1133 base pairs
     TYPE: nucleic acid
     STRANDEDNESS: single
     TOPOLOGY: linear
    MOLECULE TYPE: cDNA
US-08-846-705-3
                     99.9%; Score 1131.4; DB 2;
 Query Match
                                             Length 1133;
 Best Local Similarity
                     99.9%; Pred. No. 9.6e-261;
 Matches 1132; Conservative
                           0; Mismatches
                                          1;
                                             Indels
                                                                0;
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Qу
           Db
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        181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
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           181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Db
Qy
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Db
Qу
        301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
           Db
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Qу
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Qy	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
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Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
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Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
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Db	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
QУ	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
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Db	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	
Db	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Qу	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
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Qу	1081	CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133	
Db	1081	CTCAGTGGATGTAAAGAGAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133	

RESULT 2

PCT-US95-05616-5

[;] Sequence 5, Application PC/TUS9505616

[;] GENERAL INFORMATION:

[;] APPLICANT: LI, ET AL.

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TITLE OF INVENTION: Human Neuropeptide Receptor
      NUMBER OF SEQUENCES: 12
      CORRESPONDENCE ADDRESS:
       ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
       ADDRESSEE: CECCHI, STEWART & OLSTEIN
       STREET: 6 BECKER FARM ROAD
       CITY: ROSELAND
       STATE: NEW JERSEY
       COUNTRY: USA
       ZIP: 07068
      COMPUTER READABLE FORM:
       MEDIUM TYPE: 3.5 INCH DISKETTE
       COMPUTER: IBM PS/2
       OPERATING SYSTEM: MS-DOS
       SOFTWARE: WORD PERFECT 5.1
      CURRENT APPLICATION DATA:
       APPLICATION NUMBER: PCT/US95/05616
       FILING DATE: concurrently
       CLASSIFICATION:
     ATTORNEY/AGENT INFORMATION:
       NAME: FERRARO, GREGORY D.
       REGISTRATION NUMBER: 36,134
       REFERENCE/DOCKET NUMBER: 325800-268
      TELECOMMUNICATION INFORMATION:
       TELEPHONE: 201-994-1700
       TELEFAX: 201-994-1744
    INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 1133 BASE PAIRS
       TYPE: NUCLEIC ACID
       STRANDEDNESS: SINGLE
       TOPOLOGY: LINEAR
     MOLECULE TYPE: cDNA
 PCT-US95-05616-5
   Query Match
                       99.9%; Score 1131.4; DB 5; Length 1133;
   Best Local Similarity 99.9%; Pred. No. 9.6e-261;
   Matches 1132; Conservative
                             0; Mismatches
                                               Indels
                                                           Gaps
                                                                  0;
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             Db
           1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGACCCC 60
           61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
 Qу
             - Db
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          121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
             Db
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 Qу
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	Qу	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
	Db	361	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
	Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
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	Qy	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
	Db	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
	Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
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	QУ	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Qy	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
	Db	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
	QУ	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
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	QУ	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
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	QУ	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
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	Db	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
	Qy	1021	ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
	Db	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
	Qy	1081	CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCCTGACCATCGTGCCCCGG 1133	
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RESULT 3
US-08-846-705-1
; Sequence 1, Application US/08846705
; Patent No. 5935814
  GENERAL INFORMATION:
    APPLICANT: BERGSMA, DERK J.
    APPLICANT: ELLIS, CATHERINE E
    TITLE OF INVENTION: NOVEL G-PROTEIN COUPLED
    NUMBER OF SEQUENCES: 5
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: RATNER & PRESTIA
      STREET: P.O. BOX 980
      CITY: VALLEY FORGE
      STATE: PA
      COUNTRY: USA
      ZIP: 19482
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      .COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/846,705
      FILING DATE: 30-APR-1997
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: PRESTIA, PAUL F
      REGISTRATION NUMBER: 23,031
      REFERENCE/DOCKET NUMBER: GH-70003
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610-407-0700
      TELEFAX: 610-407-0701
      TELEX: 846169
  INFORMATION FOR SEQ ID NO: 1:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 1170 base pairs
      TYPE: nucleic acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: cDNA
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US-08-846-705-1
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 Best Local Similarity 99.7%; Pred. No. 5.6e-260;
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            Db
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Qу
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Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
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Qу	361	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
QУ	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Ďb	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
QУ	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
ДУ	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
QУ	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
QУ	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
QУ	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Qу	901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
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            Db
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RESULT 4
US-08-462-509B-5
; Sequence 5, Application US/08462509B
; Patent No. 6410701
  GENERAL INFORMATION:
    APPLICANT: Soppet, Daniel et al
    TITLE OF INVENTION: Human Neuropeptide Receptor
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Human Genome Sciences, Inc.
      STREET: 9410 Key West Avenue
      CITY: Rockiville
      STATE: MD
      COUNTRY: USA
      ZIP: 20850
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,509B
      FILING DATE: 05-JUN-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: WO PCT/US95/05616
      FILING DATE: 05-MAY-1995
    ATTORNEY/AGENT INFORMATION:
      NAME: Wales, Michele M.
     REGISTRATION NUMBER: 43,975
      REFERENCE/DOCKET NUMBER: PF168P1
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 301-309-8504
      TELEFAX: 301-309-8439
  INFORMATION FOR SEQ ID NO: 5:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 1116 base pairs
      TYPE: nucleic acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: DNA (genomic)
    FEATURE:
      NAME/KEY: CDS
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; LOCATION: 1..1116

US-08-462-509B-5

Query Match 98.4%; Score 1114.4; DB 4; Length 1116; Best Local Similarity 99.9%; Pred. No. 1.1e-256; Matches 1115: Conservative Mismatches 0; Indels 1: Gaps 0; Qу 1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60 Db 1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCTGGCAGCAGAGACCCC 60 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Qу 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Db 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 Qу 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 Db 181 CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACACATGAGGACAGTC 240 Qу 181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240 Db 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Qy 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Db 301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 Qу 301 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 Db 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Qу 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Db 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 Qу 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 Db 481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCCCAGGCT 540 Qу 481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 540 Db 541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600 Qу 541 GCAGTCATGJAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600 Db 601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660 Qy 601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660 Db 661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720 Qу Db 661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720 721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780 Qу

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RESULT 5
US-08-462-509B-1
; Sequence 1, Application US/08462509B
 Patent No. 6410701
  GENERAL INFORMATION:
    APPLICANT: Soppet, Daniel et al
    TITLE OF INVENTION: Human Neuropeptide Receptor
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: Human Genome Sciences, Inc.
     STREET: 9410 Key West Avenue
     CITY: Rockiville
     STATE: MD
     COUNTRY: USA
     ZIP: 20850
    COMPUTER READABLE FORM:
     MEDIUM TYPE: Floppy disk
     COMPUTER: IBM PC compatible
     OPERATING SYSTEM: PC-DOS/MS-DOS
     SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/462,509B
     FILING DATE: 05-JUN-1995
     CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: WO PCT/US95/05616
     FILING DATE: 05-MAY-1995
    ATTORNEY/AGENT INFORMATION:
     NAME: Wales, Michele M.
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REGISTRATION NUMBER: 43,975

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REFERENCE/DOCKET NUMBER:
                         PF168P1
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: 301-309-8504
     TELEFAX: 301-309-8439
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 1209 base pairs
     TYPE: nucleic acid
     STRANDEDNESS: single
     TOPOLOGY: linear
   MOLECULE TYPE: DNA (genomic)
   FEATURE:
     NAME/KEY:
     LOCATION:
             1..1209
US-08-462-509B-1
                    95.9%;
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                          Score 1086.4; DB 4;
                                          Length 1209;
 Best Local Similarity
                    99.98;
                         Pred. No. 5.2e-250;
 Matches 1087; Conservative
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                                          Indels
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         841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG 900
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          Db
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RESULT 6
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US-08-846-705-4
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- ; Sequence 4, Application US/08846705
- ; Patent No. 5935814
- ; GENERAL INFORMATION:
- ; APPLICANT: BERGSMA, DERK J.
- ; APPLICANT: ELLIS, CATHERINE E
- ; TITLE OF INVENTION: NOVEL G-PROTEIN COUPLED
- ; NUMBER OF SEQUENCES: 5
- ; CORRESPONDENCE ADDRESS:
- ADDRESSEE: RATNER & PRESTIA
- ; STREET: P.O. BOX 980
- ; CITY: VALLEY FORGE
- ; STATE: PA
- ; COUNTRY: USA
- ; ZIP: 19482
 - COMPUTER READABLE FORM:

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      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/846,705
      FILING DATE: 30-APR-1997
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
     NAME: PRESTIA, PAUL F
     REGISTRATION NUMBER: 23,031
     REFERENCE/DOCKET NUMBER: GH-70003
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: 610-407-0700
     TELEFAX: 610-407-0701
     TELEX: 846169
  INFORMATION FOR SEO ID NO: 4:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 1564 base pairs
     TYPE: nucleic acid
     STRANDEDNESS: single
     TOPOLOGY: linear
    MOLECULE TYPE: cDNA
US-08-846-705-4
                     95.9%; Score 1086.4; DB 2; Length 1564;
 Query Match
 Best Local Similarity 99.9%; Pred. No. 5.6e-250;
 Matches 1087; Conservative
                         0; Mismatches
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Qу
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QУ	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	694	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	753
QУ	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	754	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	813
QУ	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	814	ATTGTCACCTACCTGGCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	873
QУ	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874	AAGCTCTGGGGCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
Qу	781	CCCTCAGACCAGCTGGGGGACCTGAGCGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
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RESULT 7

US-08-846-704-1

[;] Sequence 1, Application US/08846704 ; Patent No. 6020157

[;] GENERAL INFORMATION:

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APPLICANT: BERGSMA, DERK J.
        APPLICANT: ELLIS, CATHERINE E.
        TITLE OF INVENTION: NOVEL G-PROTEIN COUPLED
        NUMBER OF SEQUENCES: 4
        CORRESPONDENCE ADDRESS:
         ADDRESSEE: RATNER & PRESTIA
         STREET: P.O. BOX 980
         CITY: VALLEY FORGE
         STATE: PA
         COUNTRY: USA
          ZIP: 19482
        COMPUTER READABLE FORM:
         MEDIUM TYPE: Diskette
         COMPUTER: IBM Compatible
         OPERATING SYSTEM: DOS
         SOFTWARE: FastSEQ for Windows Version 2.0
        CURRENT APPLICATION DATA:
         APPLICATION NUMBER: US/08/846,704
         FILING DATE: 30-APR-1997
         CLASSIFICATION: 435
        PRIOR APPLICATION DATA:
         APPLICATION NUMBER:
         FILING DATE:
        ATTORNEY/AGENT INFORMATION:
         NAME: PRESTIA, PAUL F
         REGISTRATION NUMBER: 23,031
         REFERENCE/DOCKET NUMBER: GH-70002
        TELECOMMUNICATION INFORMATION:
         TELEPHONE: 610-407-0700
         TELEFAX: 610-407-0701
         TELEX: 846169
      INFORMATION FOR SEQ ID NO: 1:
        SEQUENCE CHARACTERISTICS:
         LENGTH: 1564 base pairs
         TYPE: nucleic acid
         STRANDEDNESS: single
         TOPOLOGY: linear
       MOLECULE TYPE: cDNA
   US-08-846-704-1
     Query Match
                          95.9%; Score 1086.4; DB 3; Length 1564;
     Best Local Similarity
                          99.9%; Pred. No. 5.6e-250;
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Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCCCCATCATGGTGCCCCAGGCT	540
Db	634	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCCCTGGCCATCATGGTGCCCCAGGCT	693
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600.
Db	694	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	753
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Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	814	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	873
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
Qу	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	934	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	993
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	994	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	1053
Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	1054	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	1113
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Db	1114	AAGAGGGTGTTCGGCAAGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1173
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Qу
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Db
        1234 CTCAGTGG 1241
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US-08-846-704-3.
; Sequence 3, Application US/08846704
; Patent No. 6020157
; GENERAL INFORMATION:
    APPLICANT: BERGSMA, DERK J.
    APPLICANT: ELLIS, CATHERINE E.
    TITLE OF INVENTION: NOVEL G-PROTEIN COUPLED
   NUMBER OF SEQUENCES: 4
   . CORRESPONDENCE ADDRESS:
      ADDRESSEE: RATNER & PRESTIA
     STREET: P.O. BOX 980
     CITY: VALLEY FORGE
      STATE: PA
     COUNTRY: USA
      ZIP: 19482
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
    OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/846,704
      FILING DATE: 30-APR-1997
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
     NAME: PRESTIA, PAUL F
      REGISTRATION NUMBER: 23,031
     REFERENCE/DOCKET NUMBER: GH-70002
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610-407-0700
      TELEFAX: 610-407-0701
      TELEX: 846169
  INFORMATION FOR SEQ ID NO: 3:
   SEQUENCE CHARACTERISTICS:
     LENGTH: 1564 base pairs
      TYPE: nucleic acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: cDNA
US-08-846-704-3
 Query Match
                        95.9%; Score 1086.4; DB 3; Length 1564;
 Best Local Similarity 99.9%; Pred. No. 5.6e-250;
 Matches 1087; Conservative 0; Mismatches 1; Indels 0; Gaps
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Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db	454	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	513
QУ	361	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	514	GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	573
Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	574	GCCCTGGACCGCTGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	633
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
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Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
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Qу		GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db		GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	813
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	314	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	873
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
QУ	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
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Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900

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            Db
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        1234 CTCAGTGG 1241
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; Sequence 3, Application US/08462509B
; Patent No. 6410701
  GENERAL INFORMATION:
    APPLICANT: Soppet, Daniel et al
    TITLE OF INVENTION: Human Neuropeptide Receptor
    NUMBER OF SEQUENCES: 12
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Human Genome Sciences, Inc.
      STREET: 9410 Key West Avenue
      CITY: Rockiville
      STATE: MD
      COUNTRY: USA
      ZIP: 20850
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/462,509B
      FILING DATE: 05-JUN-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: WO PCT/US95/05616
      FILING DATE: 05-MAY-1995
    ATTORNEY/AGENT INFORMATION:
      NAME: Wales, Michele M.
      REGISTRATION NUMBER: 43,975
      REFERENCE/DOCKET NUMBER: PF168P1
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 301-309-8504
      TELEFAX: 301-309-8439
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 1110 base pairs
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TYPE: nucleic acid

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STRANDEDNESS:
                single
     TOPOLOGY: linear
   MOLECULE TYPE: DNA (genomic)
   FEATURE:
     NAME/KEY:
             CDS
     LOCATION:
             1..1110
US-08-462-509B-3
                   95.7%;
 Query Match
                         Score 1084.8; DB 4;
                                         Length 1110;
 Best Local Similarity
                   99.8%;
                         Pred. No. 1.2e-249;
 Matches 1086; Conservative
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                         0;
                                         Indels
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          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
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          121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
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Qу
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Db
Qy
       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
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          Db
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           Db
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       1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
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           Db
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       1081 CTCAGTGG 1088
RESULT 10
PCT-US95-05616-1
; Sequence 1, Application PC/TUS9505616
  GENERAL INFORMATION:
   APPLICANT: LI, ET AL.
   TITLE OF INVENTION: Human Neuropeptide Receptor
   NUMBER OF SEQUENCES: 12
   CORRESPONDENCE ADDRESS:
     ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
     ADDRESSEE: CECCHI, STEWART & OLSTEIN
     STREET: 6 BECKER FARM ROAD
     CITY: ROSELAND
     STATE: NEW JERSEY
     COUNTRY: USA
     ZIP: 07068
   COMPUTER READABLE FORM:
     MEDIUM TYPE: 3.5 INCH DISKETTE
     COMPUTER: IBM PS/2
     OPERATING SYSTEM: MS-DOS
     SOFTWARE: WORD PERFECT 5.1
   CURRENT APPLICATION DATA:
     APPLICATION NUMBER: PCT/US95/05616
     FILING DATE: concurrently
     CLASSIFICATION:
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ATTORNEY/AGENT INFORMATION:

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NAME: FERRARO, GREGORY D.
     REGISTRATION NUMBER: 36,134
     REFERENCE/DOCKET NUMBER: 325800-268
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: 201-994-1700
     TELEFAX: 201-994-1744
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 1209 BASE PAIRS
     TYPE: NUCLEIC ACID
     STRANDEDNESS:
                SINGLE
     TOPOLOGY: LINEAR
   MOLECULE TYPE: cDNA
PCT-US95-05616-1
 Query Match
                    95.5%;
                         Score 1081.6; DB 5; Length 1209;
                   99.6%;
                        Pred. No. 7.3e-249;
 Best Local Similarity
 Matches 1084; Conservative
                         0; Mismatches
                                         Indels
                                                 0; Gaps
                                                          0;
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Qу
          Db
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
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Db 541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACAC Qy 601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACA	AGTTGCTTCTTT	660 660 720 720
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	CAGATATTCCGC ACTGGAAGCGC	
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Qy 1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCA		1080
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Db 1081 CTCAGTGG 1088		
RESULT 11 PCT-US95-05616-3 ; Sequence 3, Application PC/TUS9505616 ; GENERAL INFORMATION: ; APPLICANT: LI, ET AL. : TITLE OF INVENTION: Human Neuropeptide Recentor		

TITLE OF INVENTION: Human Neuropeptide Receptor

NUMBER OF SEQUENCES: 12'

CORRESPONDENCE ADDRESS:

ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,

ADDRESSEE: CECCHI, STEWART & OLSTEIN

STREET: 6 BECKER FARM ROAD

CITY: ROSELAND

STATE: NEW JERSEY

COUNTRY: USA

ZIP: 07068

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 INCH DISKETTE

COMPUTER: IBM PS/2

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OPERATING SYSTEM: MS-DOS
     SOFTWARE: WORD PERFECT 5.1
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: PCT/US95/05616
     FILING DATE: concurrently
     CLASSIFICATION:
    ATTORNEY/AGENT INFORMATION:
     NAME: FERRARO, GREGORY D.
     REGISTRATION NUMBER: 36,134
     REFERENCE/DOCKET NUMBER:
                          325800-268
    TELECOMMUNICATION INFORMATION:
     TELEPHONE: 201-994-1700
     TELEFAX: 201-994-1744
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
     LENGTH: 1110 BASE PAIRS
     TYPE: NUCLEIC ACID
     STRANDEDNESS: SINGLE
     TOPOLOGY: LINEAR
   MOLECULE TYPE:
PCT-US95-05616-3
 Query Match
                    95.0%;
                           Score 1076.8; DB 5; Length 1110;
 Best Local Similarity
                    99.4%;
                           Pred. No. 1e-247;
 Matches 1081; Conservative
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                            Mismatches
                                        7;
                                           Indels
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                                                       Gaps
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         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
           1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
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            Db
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Db	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCCCCATGGTGCCCCAGGCT	540
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Db	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
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Db	961	AAGAGGGTGTTCGGCAAGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
QУ	1021	ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Db	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
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RESULT 12

US-08-513-974B-375

; Sequence 375, Application US/08513974B

1.785

- ; Patent No. 6114139
- ; GENERAL INFORMATION:
- ; APPLICANT: Hinuma, Shuji
- APPLICANT: Hosoya, Masaki
- ; APPLICANT: Fujii, Ryo
- ; APPLICANT: Ohtaki, Tetsuya
- ; APPLICANT: Fukusumi, Shoji
- ; APPLICANT: Ohgi, Kazuhiro

```
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN.
TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
NUMBER OF SEQUENCES: 380
CORRESPONDENCE ADDRESS:
  ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
  STREET: 130 Water Street
  CITY: Boston
  STATE: MA
  COUNTRY: USA
  ZIP: 02109
COMPUTER READABLE FORM:
  MEDIUM TYPE: Floppy disk
  COMPUTER: IBM PC compatible
  OPERATING SYSTEM: PC-DOS/MS-DOS
  SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
  APPLICATION NUMBER: US/08/513,974B
  FILING DATE: 14-SEP-1995
  CLASSIFICATION: 536
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: PCT/JP95/01599
  FILING DATE: 10-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-093989
  FILING DATE: 19-AUG-1995
PRIOR APPLICATION DATA:
 APPLICATION NUMBER: JP 7-057186
  FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 7-007177
  FILING DATE: 20-JAN-1995
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-326611
  FILING DATE: 28-DEC-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-270017
  FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-236357
  FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-236356
  FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-189274
  FILING DATE: 11-AUG-1994
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-189273
  FILING DATE: 11-AUG-1945
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: JP 6-189272
  FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
  NAME: Resnick, David S.
  REGISTRATION NUMBER: 34,235
  REFERENCE/DOCKET NUMBER: 45753
TELECOMMUNICATION INFORMATION:
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TELEPHONE: 617-523-3400
    TELEFAX: 617-523-6440
  INFORMATION FOR SEQ ID NO: 375:
   SEQUENCE CHARACTERISTICS:
    LENGTH: 843 base pairs
    TYPE: nucleic acid
    STRANDEDNESS: double
    TOPOLOGY: linear
   MOLECULE TYPE: cDNA
   FEATURE:
    NAME/KEY: CDS
    LOCATION: 28..816
US-08-513-974B-375
                       Score 697.6; DB 3;
 Query Match
                 61.6%;
                                     Length 843;
                      Pred. No. 2.4e-157;
 Best Local Similarity
                 89.9%;
 Matches 748; Conservative
                      0; Mismatches
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                                     Indels
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       129 TCTACAGGCCGTGTCCGTGTCAGTGGTCGTGCTGACTCTCAGCTCCATCGCCCTGGACCG 188
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           729 CGGGATGTTCCGCCAAGCCAGCGACCGAGAGGCCATCTACGCCTGCTTCACCTTCTCCCA 788
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       1032 CTGGCTGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTC 1083
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           Db
RESULT 13
US-08-513-974B-55
; Sequence 55, Application US/08513974B
; Patent No. 6114139
  GENERAL INFORMATION:
    APPLICANT: Hinuma, Shuji
    APPLICANT: Hosoya, Masaki
   APPLICANT: Fujii, Ryo
    APPLICANT: Ohtaki, Tetsuya
    APPLICANT: Fukusumi, Shoji
    APPLICANT:
              Ohqi, Kazuhiro
    TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
    TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
    NUMBER OF SEQUENCES: 380
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
     STREET: 130 Water Street
     CITY: Boston
     STATE: MA
     COUNTRY: USA
     ZIP: 02109
    COMPUTER READABLE FORM:
     MEDIUM TYPE: Floppy disk
     COMPUTER: IBM PC compatible
     OPERATING SYSTEM: PC-DOS/MS-DOS
     SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/513,974B
     FILING DATE: 14-SEP-1995
     CLASSIFICATION: 536
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: PCT/JP95/01599
     FILING DATE: 10-AUG-1995
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: JP 7-093989
     FILING DATE: 19-AUG-1995
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: JP 7-057186
     FILING DATE: 16-MAR-1995
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PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 7-007177
      FILING DATE: 20-JAN-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-326611
      FILING DATE: 28-DEC-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-270017
      FILING DATE: 02-NOV-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-236357
      FILING DATE: 30-SEP-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-236356
      FILING DATE: 30-SEP-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-189274
      FILING DATE: 11-AUG-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-189273
      FILING DATE: 11-AUG-1945
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: JP 6-189272
      FILING DATE: 11-AUG-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Resnick, David S.
      REGISTRATION NUMBER: 34,235
      REFERENCE/DOCKET NUMBER: 45753
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 617-523-3400
      TELEFAX: 617-523-6440
  INFORMATION FOR SEQ ID NO: 55:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 789 base pairs
      TYPE: nucleic acid
      STRANDEDNESS: double
      TOPOLOGY: linear
    MOLECULE TYPE: cDNA
US-08-513-974B-55
                       59.2%; Score 670.6; DB 3; Length 789;
 Query Match
 Best Local Similarity 90.6%; Pred. No. 6.5e-151;
 Matches 715; Conservative
                             0; Mismatches 74; Indels
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        391 TCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGTATGCCATCTGCCAC 450
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       571 GAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCTGGGCAGATGACCTC 630
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Db
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; Sequence 55, Application US/09461436B
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   GENERAL INFORMATION:
      APPLICANT: Shuji Hinuma
             Yasuaki Ito
             Ryo Fujii
      TITLE OF INVENTION: G Protein Coupled Receptor Protein,
                   Production, And Use Thereof
      NUMBER OF SEQUENCES: 61
      CORRESPONDENCE ADDRESS:
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ADDRESSEE: Edwards & Angell, LLP

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STREET: 101 Federal Street
              CITY: BOSTON
              STATE: MA
              COUNTRY: USA
              ZIP: 02209
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
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              APPLICATION NUMBER: US/09/461,436B
              FILING DATE: 14-Dec-1999
              CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: 08/513,974
              FILING DATE: 14-SEP-1995
              APPLICATION NUMBER: PCT/JP95/01599
              FILING DATE: 10-AUG-1995
              APPLICATION NUMBER: 7-093989
              FILING DATE: 19-APR-1995
              APPLICATION NUMBER: 7-057186
              FILING DATE: 16-MAR-1995
              APPLICATION NUMBER: 7-007177
              FILING DATE: 20-JAN-1995
              APPLICATION NUMBER: 6-326611
              FILING DATE: 28-DEC-1994
              APPLICATION NUMBER: 6-270017
              FILING DATE: 02-NOV-1994
              APPLICATION NUMBER: 6-236357
              FILING DATE: 30-SEP-1994
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              FILING DATE: 11-AUG-1994
        ATTORNEY/AGENT INFORMATION:
              NAME: CONLIN, DAVID G.
              REGISTRATION NUMBER: <Unknown>
              REFERENCE/DOCKET NUMBER: 45753 DIV2
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: 617-439-4444
              TELEFAX: 617-439-4170
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              LENGTH: 789 base pairs
              TYPE: nucleic acid
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US-09-461-436B-55
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; Patent No. 6166193
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    TITLE OF INVENTION: CDNA CLONE MY1 THAT ENCODES
    TITLE OF INVENTION: A NOVEL HUMAN 7-TRANSMEMBRANE RECEPTOR
    NUMBER OF SEQUENCES: 2
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SmithKline Beecham Corporation
      STREET: 709 Swedeland Road
      CITY: King of Prussia
      STATE: PA
      COUNTRY: United States of America
      ZIP: 19406
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEO for Windows Version 2.0
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      APPLICATION NUMBER: US/09/119,788
      FILING DATE: 21-JUL-1998
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 60/053,790
      FILING DATE: 25-JUL-1997
    ATTORNEY/AGENT INFORMATION:
      NAME: King, William T
      REGISTRATION NUMBER: 30,954
      REFERENCE/DOCKET NUMBER: GH50029
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610-270-5515
      TELEFAX: 610-270-5090
      TELEX:
  INFORMATION FOR SEQ ID NO: 1:
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 15, 2004, 19:59:43; Search time 584.359 Seconds

(without alignments)

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Title:

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Perfect score:

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Scoring table:

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Gapop 10.0 , Gapext 1.0

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Total number of hits satisfying chosen parameters:

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Listing first 45 summaries

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US-09-393-696-5

- ; Sequence 5, Application US/09393696
- ; Publication No. US20030022277A1
- ; GENERAL INFORMATION:

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  TITLE OF INVENTION: Human Neuropeptide Receptor
  FILE REFERENCE: PF168P2
  CURRENT APPLICATION NUMBER: US/09/393,696
  CURRENT FILING DATE: 1999-09-10
  EARLIER APPLICATION NUMBER: PCT/US95/05616
  EARLIER FILING DATE: 1995-05-05
  EARLIER APPLICATION NUMBER: US08/462,509
  EARLIER FILING DATE: 1995-06-05
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 Sequence 5, Application US/10077874
 Publication No. US20020115155A1
  GENERAL INFORMATION:
      APPLICANT: Soppet, Daniel et al
      TITLE OF INVENTION: Human Neuropeptide Receptor
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NUMBER OF SEQUENCES: 12 CORRESPONDENCE ADDRESS:

CITY: Rockville

STATE: MD

ADDRESSEE: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue

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COUNTRY: USA
            ZIP: 20850
       COMPUTER READABLE FORM:
            MEDIUM TYPE: Floppy disk
            COMPUTER: IBM PC compatible
            OPERATING SYSTEM: PC-DOS/MS-DOS
            SOFTWARE: PatentIn Release #1.0, Version #1.30
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            FILING DATE: 20-Feb-2002
            CLASSIFICATION: <Unknown>
       PRIOR APPLICATION DATA:
            APPLICATION NUMBER: 08/462,509
            FILING DATE: 05-JUNE-1995
       ATTORNEY/AGENT INFORMATION:
            NAME: Wales, Michele M.
            REGISTRATION NUMBER: 43,975
            REFERENCE/DOCKET NUMBER: PF168P1D1
       TELECOMMUNICATION INFORMATION:
            TELEPHONE: 301-309-8504
            TELEFAX: 301-309-8439
   INFORMATION FOR SEQ ID NO: 5:
       SEQUENCE CHARACTERISTICS:
            LENGTH: 1116 base pairs
            TYPE: nucleic acid
            STRANDEDNESS: single
            TOPOLOGY: linear
       MOLECULE TYPE: DNA (genomic)
       FEATURE:
           NAME/KEY: CDS
            LOCATION: 1..1116
       SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-10-077-874-5
                      98.4%;
 Query Match
                             Score 1114.4; DB 14; Length 1116;
                      99.9%; Pred. No. 6.2e-311;
 Best Local Similarity
 Matches 1115; Conservative
                            0; Mismatches
                                           1; Indels
                                                                  0;
                                                        0; Gaps
Qу
          1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
            Db
          1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGACCCC 60
         61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
Qу
            Db
         61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
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Qу
            Db
        121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
        181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qу
            Db
        181 CTGGTGGCCACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
        241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
            241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Db
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Qy Db		CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	
Qy		GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	
Db			
Qу	421	GCCCTGGACCGCTGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	421		480
Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCGCCATCATGGTGCCCCAGGCT	540
Db	481		540
Qy	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541		600
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	6 01	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
QУ	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
QУ	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
QУ	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Qу	961	AAGAGGGTGTTCGGCGAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC.	1020
Db		AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	
		ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	
	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
-	1081	CTCAGTGGATGTAAAGAGAAGAGTCTAGTTCTGTCC 1116	•
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RESULT 3
US-10-225-567A-367
; Sequence 367, Application US/10225567A
; Publication No. US20030113798A1
; GENERAL INFORMATION:
  APPLICANT: LifeSpan Biosciences
  APPLICANT: Brown, Joseph P.
  APPLICANT: Burmer, Glenna C.
  APPLICANT: Roush, Christine L.
  TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED
RECEPTORS (GPCRS)
  FILE REFERENCE: 1920-4-4
  CURRENT APPLICATION NUMBER: US/10/225,567A
  CURRENT FILING DATE: 2001-12-19
  PRIOR APPLICATION NUMBER: 60/257,144
  PRIOR FILING DATE: 2000-12-19
  NUMBER OF SEQ ID NOS: 2292
  SOFTWARE: PatentIn version 3.1
 SEO ID NO 367
   LENGTH: 1564
   TYPE: DNA
   ORGANISM: Homo sapiens
US-10-225-567A-367
                     95.9%; Score 1086.4; DB 15; Length 1564;
 Query Match
 Best Local Similarity
                     99.9%; Pred. No. 8e-303;
 Matches 1087; Conservative
                          0; Mismatches
                                         1; Indels
                                                     0; Gaps
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         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
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           214 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 273
Db
        121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTGTTCGTCGTGGCC 180
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Qу
           334 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 393
Db
        241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qy
           Db
        394 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 453
Qy
        301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
           454 CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 513
Db
Qу
        361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
           Db
        514 GTCATCCCCTATCTACAGGCTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 573
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QУ	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
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Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Db	634	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	693
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	694	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	753
Qу	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	754	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	813
Qу			720
Db	814	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	873
Qу			780
Db			933
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Qу		CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	
Db			1053
Qу	901		960
Db	1054	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	1113
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	1114	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1173
Qу	1021	ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Db	1174	ACCTTCTCCCACTGGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1233
Qу		CTCAGTGG 1088	
Db		CTCAGTGG 1241	

US-10-352-684A-21

- ; Sequence 21, Application US/10352684A
- ; Publication No. US20030215452A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Millennium Pharmaceuticals Inc.
- ; APPLICANT: Carroll, Joseph M.
- ; APPLICANT: Healy, Aileen

```
APPLICANT: Weich, Nadine S.
  APPLICANT: Kelly, Louise M.
  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING
  TITLE OF INVENTION: HEMATOLOGICAL DISORDERS USING 131, 148, 199, 12303,
  TITLE OF INVENTION: 15513, 17822, 302, 5677, 194, 14393, 28059, 7366, 12212,
  TITLE OF INVENTION: 1981, 261, 12416, 270, 1410, 137, 1871, 13051, 1847,
1849,
  TITLE OF INVENTION: 15402, 340, 10217, 837, 1761, 8990 OR 13249 MOLECULES
  FILE REFERENCE: MPI02-019P1RNOMNIM
  CURRENT APPLICATION NUMBER: US/10/352,684A
   CURRENT FILING DATE: 2003-01-28
  PRIOR APPLICATION NUMBER: US 60/354,333
  PRIOR FILING DATE: 2002-02-04
  PRIOR APPLICATION NUMBER: US 60/360,258
  PRIOR FILING DATE: 2002-02-28
  PRIOR APPLICATION NUMBER: US 60/364,476
  PRIOR FILING DATE: 2002-03-15
  PRIOR APPLICATION NUMBER: US 60/375,626
  PRIOR FILING DATE: 2002-04-26
  PRIOR APPLICATION NUMBER: US 60/386,494
  PRIOR FILING DATE: 2002-06-06
  PRIOR APPLICATION NUMBER: US 60/390,965
  PRIOR FILING DATE: 2002-06-24
  PRIOR APPLICATION NUMBER: US 60/392,480
  PRIOR FILING DATE: 2002-06-28
  PRIOR APPLICATION NUMBER: US 60/394,128
  PRIOR FILING DATE: 2002-07-03
  PRIOR APPLICATION NUMBER: US 60/399,783
  PRIOR FILING DATE: 2002-07-31
  PRIOR APPLICATION NUMBER: US 60/403,221
  PRIOR FILING DATE: 2002-08-13
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 62
  SOFTWARE: FastSEQ for Windows Version 4.0
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   LENGTH: 1564
   TYPE: DNA
   ORGANISM: Homo Sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (154)...(1431)
US-10-352-684A-21
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                        95.9%; Score 1086.4; DB 16; Length 1564;
 Best Local Similarity 99.9%; Pred. No. 8e-303;
 Matches 1087; Conservative 0; Mismatches 1; Indels
                                                                        0;
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          61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
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Qу
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Db	394	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	453
Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db	454	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	513
Qу	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	514	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	573
Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	574	GCCCTGGACCGCTGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	633
QΥ		GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCGGCCATCATGGTGCCCCAGGCT	
Db	634	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCGCCATCATGGTGCCCCAGGCT	693
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
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Qу		GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	
Db		GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	
Qу		ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	
Db		ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	
Qу		AAGCTCTGGGGCCGCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	
Db		AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	
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Qy Db		CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	
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ΣУ	901	AAGAGGGTGTTCGGCAAGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020

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        1021 ACCTTCTCCCACTGGCTGTTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
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             Db
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RESULT 5
US-10-077-874-3
; Sequence 3, Application US/10077874
; Publication No. US20020115155A1
   GENERAL INFORMATION:
        APPLICANT: Soppet, Daniel et al
        TITLE OF INVENTION: Human Neuropeptide Receptor
        NUMBER OF SEQUENCES: 12
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Human Genome Sciences, Inc.
             STREET: 9410 Key West Avenue
             CITY: Rockville
             STATE: MD
             COUNTRY: USA
             ZIP: 20850
        COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: PatentIn Release #1.0, Version #1.30
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/10/077,874
             FILING DATE: 20-Feb-2002
             CLASSIFICATION: <Unknown>
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 08/462,509
             FILING DATE: 05-JUNE-1995
        ATTORNEY/AGENT INFORMATION:
             NAME: Wales, Michele M.
             REGISTRATION NUMBER: 43,975
             REFERENCE/DOCKET NUMBER: PF168P1D1
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: 301-309-8504
             TELEFAX: 301-309-8439
   INFORMATION FOR SEQ ID NO: 3:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 1110 base pairs
             TYPE: nucleic acid
             STRANDEDNESS: single
             TOPOLOGY: linear
        MOLECULE TYPE: DNA (genomic)
        FEATURE:
             NAME/KEY: CDS
             LOCATION: 1..1110
        SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-077-874-3
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Query Match 95.7%; Score 1084.8; DB 14; Length 1110; Best Local Similarity 99.8%; Pred. No. 2.1e-302; Matches 1086; Conservative 0; Mismatches 2; Indels 0: Gaps 0; 1 ATGGAGCCTCAGCCACCCAGGGGCCCAGATGGGGGTCCCCCTGGCAGCAGAGAGCCC 60 Qу ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60 Db 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 Qу Db 61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 Qу Db 121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180 181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240 Qу Db 181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACACATGAGGACAGTC 240 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Qу 241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300 Db 301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 Qу 301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360 Db 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Qу 361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420 Db 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 Qу Db 421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480 Qу 481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGCCCTGGCCATCATGGTGCCCCAGGCT 540 481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 540 Db 541 GCAGTCATGGAATGCAGCAGTGTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600 Qу 541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600 Db Qу 601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660 601 GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT 660 Db Qу 661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720 661 ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC 720 Db Qу 721 AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780 721 AAGCTCTGGGGCCGCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC 780 Db

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RESULT 6
US-10-077-874-1
; Sequence 1, Application US/10077874
; Publication No. US20020115155A1
   GENERAL INFORMATION:
       APPLICANT: Soppet, Daniel et al
       TITLE OF INVENTION: Human Neuropeptide Receptor
       NUMBER OF SEQUENCES: 12
       CORRESPONDENCE ADDRESS:
           ADDRESSEE: Human Genome Sciences, Inc.
           STREET: 9410 Key West Avenue
           CITY: Rockville
           STATE: MD
           COUNTRY: USA
           ZIP: 20850
       COMPUTER READABLE FORM:
           MEDIUM TYPE: Floppy disk
           COMPUTER: IBM PC compatible
           OPERATING SYSTEM: PC-DOS/MS-DOS
           SOFTWARE: PatentIn Release #1.0, Version #1.30
       CURRENT APPLICATION DATA:
                                                          79.79.7°
           APPLICATION NUMBER: US/10/077,874
           FILING DATE: 20-Feb-2002
           CLASSIFICATION: <Unknown>
       PRIOR APPLICATION DATA:
           APPLICATION NUMBER: 08/462,509
           FILING DATE: 05-JUNE-1995
       ATTORNEY/AGENT INFORMATION:
           NAME: Wales, Michele M.
           REGISTRATION NUMBER: 43,975
           REFERENCE/DOCKET NUMBER: PF168P1D1
       TELECOMMUNICATION INFORMATION:
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TELEPHONE: 301-309-8504
          TELEFAX: 301-309-8439
   INFORMATION FOR SEQ ID NO: 1:
       SEQUENCE CHARACTERISTICS:
          LENGTH: 1209 base pairs
          TYPE: nucleic acid
          STRANDEDNESS: single
          TOPOLOGY: linear
      MOLECULE TYPE: cDNA
       FEATURE:
          NAME/KEY:
                  CDS
          LOCATION: 1..1209
      SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-077-874-1
 Query Match
                    95.7%;
                         Score 1084.8; DB 14; Length 1209;
 Best Local Similarity
                   99.8%;
                         Pred. No. 2.2e-302;
 Matches 1086; Conservative
                         0; Mismatches
                                          Indels
                                                 0; Gaps
                                                          0;
         1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC 60
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          1 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 60
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Qу
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          121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
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       181 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACATGAGGACAGTC 240
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Qу
       481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
          481 GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT 540
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       541 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 600
Qу
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Db	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
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Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	661	ATTGTCACCTACCTGGCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGCC	840
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Db	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
Qу	901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
Db	901		960
Qу	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Db	961	AAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTC	1020
Qу	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Db	1021	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1080
Qу	1081	CTCAGTGG 1088	
Db	1081	CTCAGTGG 1088	

US-09-828-538-23

- ; Sequence 23, Application US/09828538
- ; Patent No. US20010025031A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Ellis, Catherine E.
- ; APPLICANT: Kwok, Cheni
- ; APPLICANT: Bodsworth, Nicola J.
- ; APPLICANT: Halsey, Wendy
- ; APPLICANT: Van Horn, Stephanie
- ; TITLE OF INVENTION: HFGAN72 Receptor Genomic DNA and Methods
- ; TITLE OF INVENTION: of Use Thereof in Diagnostic Applications
- ; FILE REFERENCE: GH-50038-C1
- ; CURRENT APPLICATION NUMBER: US/09/828,538
- CURRENT FILING DATE: 2001-04-06
- ; PRIOR APPLICATION NUMBER: 60/088,624
- ; PRIOR FILING DATE: 1998-06-08
- ; PRIOR APPLICATION NUMBER: 60/093,726

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PRIOR APPLICATION NUMBER: 09/328,014
  PRIOR FILING DATE: 1999-06-08
  NUMBER OF SEQ ID NOS: 24
  SOFTWARE: FastSEQ for Windows Version 3.0
 SEQ ID NO 23
   LENGTH: 1564
   TYPE: DNA
   ORGANISM: HOMO SAPIENS
US-09-828-538-23
 Query Match
                   95.7%;
                         Score 1084.8; DB 9; Length 1564;
 Best Local Similarity 99.8%; Pred. No. 2.3e-302;
 Matches 1086; Conservative
                        0; Mismatches
                                      2;
                                         Indels
                                                0; Gaps
                                                         0:
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          154 ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCG 213
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        61 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG 120
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          214 TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGCGATTATCTG 273
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       121 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCC 180
Qу
          274 TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC 333
Db
       181 CTGGTGGCCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 240
Qу
          334 CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC 393
Db
       241 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 300
Qу
          394 ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG 453
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       301 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 360
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          454 CCGGCCAGCCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG 513
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       361 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 420
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          514 GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC 573
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       421 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG 480
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       694 GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA 753
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Qу
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PRIOR FILING DATE: 1998-07-22

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Qу	721	AAGCTCTGGGGCCCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	874	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	933
Qу	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	934	CCCTCAGACCAGCTGGGGGACCTGAGCGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	993
Qу	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
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Qу	901	ATGGTGGTGCTGCTCTCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
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Db	1174	ACCTTCTCCCACTGGCTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC	1233
QУ	1081	CTCAGTGG 1088	
Db	1234	CTCAGTGG 1241	

US-09-393-696-1

- ; Sequence 1, Application US/09393696
- ; Publication No. US20030022277A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Human Genome Sciences, Inc. et al.
- ; TITLE OF INVENTION: Human Neuropeptide Receptor
- ; FILE REFERENCE: PF168P2
- ; CURRENT APPLICATION NUMBER: US/09/393,696
- ; CURRENT FILING DATE: 1999-09-10
- ; EARLIER APPLICATION NUMBER: PCT/US95/05616
- ; EARLIER FILING DATE: 1995-05-05
- ; EARLIER APPLICATION NUMBER: US08/462,509
- ; EARLIER FILING DATE: 1995-06-05
- ; NUMBER OF SEQ ID NOS: 23
- ; SOFTWARE: PatentIn Ver. 2.0
- ; SEQ ID NO 1
- ; LENGTH: 1209
- ; TYPE: DNA
- ; ORGANISM: Homo sapiens
- ; FEATURE:
- ; NAME/KEY: CDS

; LOCATION: (1)..(1209) US-09-393-696-1

	cal	95.5%; Score 1081.6; DB 10; Length 1209; Similarity 99.6%; Pred. No. 1.8e-301; 4; Conservative 0; Mismatches 4; Indels 0; Gaps	0;
Qу	1	ATGGAGCCCTCAGCCACCCCAGGGGCCCAGATGGGGGTCCCCCCTGGCAGCAGAGAGCCC	60
Db	1		60
QУ	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
Db	61	TCCCCTGTGCCTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTG	120
QУ	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
Db	121	TACCCAAAACAGTATGAGTGGGTCCTCATCCCAGCCTATGTGGCTGTGTTCGTCGTGGCC	180
Qy	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
Db	181	CTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
Qу	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Db	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
Qý	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Qy	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Qy	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Db	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541	GCAGTCATGGAATGCRGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Qy	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	601	GTCTGTCATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Qy	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCCTATTTCCAGATATTCCGC	720
Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780

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Qу
            841 CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAGACAGCCAAGATGCTG 900
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            Db
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Db
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US-09-826-509-548
; Sequence 548, Application US/09826509
; Publication No. US20030204073A1
; GENERAL INFORMATION:
  APPLICANT: Lehmann-Bruinsma, Karin
  APPLICANT: Liaw, Chen W.
  APPLICANT: Lin, I-Lin
  TITLE OF INVENTION: No. US20030204073A1-Endogenous, Constitutively Activated
  TITLE OF INVENTION: Protein-Coupled Receptors
  FILE REFERENCE: AREN-207
  CURRENT APPLICATION NUMBER: US/09/826,509
  CURRENT FILING DATE: 2001-04-05
  PRIOR APPLICATION NUMBER: 60/195,747
  PRIOR FILING DATE: 2000-04-07
  PRIOR APPLICATION NUMBER: 09/170,496
  PRIOR FILING DATE: 1998-10-13
  NUMBER OF SEQ ID NOS: 589
  SOFTWARE: PatentIn Version 2.1
; SEQ ID NO 548
   LENGTH: 1278
   TYPE: DNA
   ORGANISM: Homo sapiens
US-09-826-509-548
                      95.5%; Score 1081.6; DB 11;
 Query Match
                                                Length 1278;
 Best Local Similarity
                      99.6%; Pred. No. 1.8e-301;
 Matches 1084; Conservative
                            0; Mismatches
                                              Indels
                                                                 0;
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QУ	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
Db	121	TACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTCGTGGCC	180
Qу		CTGGTGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTC	240
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Qy	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
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Qy .	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
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QΥ	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Db	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
Db	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
QУ	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCT	540
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Qy	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
Db	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
ДÀ	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Db	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
Db ·	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
QУ	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Db	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
Qу	781	CCCTCAGACCAGCTGGGGGACCTGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
Db	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGC	840
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US-09-393-696-3
; Sequence 3, Application US/09393696
; Publication No. US20030022277A1
; GENERAL INFORMATION:
  APPLICANT: Human Genome Sciences, Inc. et al.
  TITLE OF INVENTION: Human Neuropeptide Receptor
  FILE REFERENCE: PF168P2
  CURRENT APPLICATION NUMBER: US/09/393,696
  CURRENT FILING DATE: 1999-09-10
  EARLIER APPLICATION NUMBER: PCT/US95/05616
  EARLIER FILING DATE: 1995-05-05
  EARLIER APPLICATION NUMBER: US08/462,509
  EARLIER FILING DATE: 1995-06-05
  NUMBER OF SEQ ID NOS: 23
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 3
   LENGTH: 1110
   TYPE: DNA
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: CDS
   LOCATION: (1)..(1110)
US-09-393-696-3
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                     95.0%; Score 1076.8; DB 10; Length 1110;
 Best Local Similarity 99.4%; Pred. No. 4.3e-300;
 Matches 1081; Conservative
                        0; Mismatches
                                         7; Indels
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	Db	241	ACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTG	300
	Qу	301	CCGGCCAGCCTGCTGGACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAG	360
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	Qy	361	GTCATCCCCTATCTACAGGCTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATC	420
	Db	361		420
	Qу	421	GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
	Db	421	CCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGG	480
	Qу	481	GCCCGTGGCTCCATCCTGGGCATCTGGGCTGTCGCCGATCATGGTGCCCCAGGCT	540
	Db	481		540
	Qу	541	GCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
	Db	541	GCAGTCATGCAATCCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCA	600
·	Qγ	601	GTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Db	601	CTCTGTCATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTT	660
	Qу	661	ATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
	Db	661	ATTGTCACCTACCTGGCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGC	720
	Qу	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
	Db	721	AAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGC	780
	QУ	781	CCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGC	840
	Db	781	TELLITION OF THE COURT OF THE C	840
	Qy	841	CGCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTG	900
	Db	841		900
	QУ	901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTT	960
	Db	901	ATGGTGGTGCTGCTCTCCCCCTCTGCTACCTCCCCATCAGCGTCCTCAATGTCCTT	960
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       1021 ACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTC 1080
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           Db
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Db
RESULT 11
US-09-730-931-1
; Sequence 1, Application US/09730931
; Patent No. US20020064814A1
 GENERAL INFORMATION:
  APPLICANT: ELLIS, CATHERINE E.
  TITLE OF INVENTION: DOG OREXIN 1 RECEPTOR
  FILE REFERENCE: GH-70669
  CURRENT APPLICATION NUMBER: US/09/730,931
  CURRENT FILING DATE: 2000-12-06
  PRIOR APPLICATION NUMBER: 60/169,373
  PRIOR FILING DATE: 1999-12-07
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: FastSEO for Windows Version 3.0
 SEO ID NO 1
   LENGTH: 1281
   TYPE: DNA
   ORGANISM: CANIS FAMILIARIS
US-09-730-931-1
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                    80.5%;
                          Score 912; DB 9; Length 1281;
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                         Pred. No. 1.5e-252;
 Best Local Similarity
 Matches 988; Conservative
                         0; Mismatches 100; Indels
                                                  6; Gaps
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Qу
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Db
        61 TCTCCGTCACTGGTGCCTCCCGACTATGAAGACGAGTTCCTGCGCTATCTGTGGCGCGAT 120
       115 TATCTGTACCCAAAACAGTATGAGTGGGTCCTCATCGCAGCCTATGTGGCTGTTCGTC 174
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       121 TACCTGTACCCAAAGCAGTATGAGTGGGTCCTCATCGCTGCCTACGTGGCTGTTTCCTA 180
       175 GTGGCCCTGGTGGGCAACACGCTGGTCTGCCTGGCCGTGTGGCGGAACCACCACATGAGG 234
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Qy
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Qy	415	TTCATCGCCCTGGACCGCTGGTATGCCATCTGCCACCCAC	474
Db	421	TTCATCGCCCTGGACCGCTGTATGCCATCTGCCACCCGCTGTTGTTCAAGAGCACCGCC	480
Qу	475	CGGCGGGCCCGTGGCTCCATCCTGGGCATCTGGGCTGTGTCGCTGGCCATCATGGTGCCC	534
Db	481	CGGCGCCCCCAGCTCCATCCTGGGCATCTGGGCTGTCATTGGCTGTCATGGTACCT	540
Qу	535	CAGGCTGCAGTCATGGAATGCAGCAGTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTC	594
Db	541	CAGGCTGCCGTCATGGAATGCAGCAGCGTGCTCCCTGAGCTAGCCAACCGCACCCGCCTC	600
Qу	595	TTCTCAGTCTGTGATGAACGCTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGC	654
Db	601	TTCTCTGTGTGATGAACACTGGGCAGATGACCTCTATCCCAAGATCTACCACAGTTGC	660
QУ	655	TTCTTTATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGGCCTATTTCCAGATA	714
Db	661	${\tt TTCTTCATTGTCACCTACTTGGCCCCACTGGGCCTCATTGGCCATTGGCCTATTTCCAGATC}$	720
Qу	715	TTCCGCAAGCTCTGGGGCCGCCAGATCCCCGGCACCACCTCAGCACTGGTGCGGAACTGG	774
Db	721	TTCCGCAAGCTCTGGGGCCGCCAGATCCCTGGCACCACATCGGCCCTGGTGAGGAACTGG	780
Qу		AAGCGCCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCC	
Db	781	AAGCGGCCTCGGACCAGCTGGAGGACCAGGGGCCCGGCCTGAGCGCGGAACCCCCCCT	840
QΫ		CGGGGCCGCCTTCCTGGCTGAAGTGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAG	
Db	841	CGGGCCCGGGCCTTCCTGGCTGAGGTGAAGCAGATGCGAGCGCGGAGGAAGACGGCCAAG	900
Qу		ATGCTGATGGTGCTGCTGCTCTCTCCTCTGCTACCTGCCCATCAGCGTCCTCAAT	
Db	901	ATGCTGATGGTGCTGCTGGTCTTTGCCCTCTGCTACCTGCCCATCAGTGTCCTCAAT	960
Qу		GTCCTTAAGAGGGTGTTCGGGATGTTCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCC	
Db		GTCCTCAAGAGGGTGTTCGGGATGTTCCGCCAATCCAGTGACCGAGAAGCCGTGTACGCC	
QУ		TGCTTCACCTTCTCCCACTGGCTGTGTACGCCAACAGCGCTGCCAACCCCATCATCTAC	
Db		TGCTTCACCTTCTCCCACTGGCTGTTATGCCAACAGCGCTGCCAACCCCATCATCTAC	1080
Qу		AACTTCCTCAGTGG 1088	
Db	1081	AACTTCCTCAGCGG 1094	

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US-10-278-087A-55
; Sequence 55, Application US/10278087A
; Publication No. US20030138817A1
    GENERAL INFORMATION:
         APPLICANT: Shuji Hinuma
                    Yasuaki Ito
                    Ryo Fujii
         TITLE OF INVENTION: G Protein Coupled Receptor Protein,
                             Production, And Use Thereof
         NUMBER OF SEQUENCES: 61
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Edwards & Angell, LLP
              STREET: 101 Federal Street
              CITY: BOSTON
              STATE: MA
              COUNTRY: USA
              ZIP: 02209
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/10/278,087A
              FILING DATE: 31-Jan-2003
             CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 09/461,436
              FILING DATE: 14-DEC-1999
              APPLICATION NUMBER: 09/038,572
              FILING DATE: 11-MAR-1998
              APPLICATION NUMBER: 08/513,974
              FILING DATE: 14-SEP-1995
              APPLICATION NUMBER: PCT/JP95/01599
              FILING DATE: 10-AUG-1995
              APPLICATION NUMBER: 7-093989
              FILING DATE: 19-APR-1995
              APPLICATION NUMBER: 7-057186
              FILING DATE: 16-MAR-1995
             APPLICATION NUMBER: 7-007177
              FILING DATE: 20-JAN-1995
              APPLICATION NUMBER: 6-326611
              FILING DATE: 28-DEC-1994
              APPLICATION NUMBER: 6-270017
              FILING DATE: 02-NOV-1994
             APPLICATION NUMBER: 6-236357
              FILING DATE: 30-SEP-1994
              APPLICATION NUMBER: 6-236356
              FILING DATE: 30-SEP-1994
              APPLICATION NUMBER: 6-189274
              FILING DATE: 11-AUG-1994
              APPLICATION NUMBER: 6-189273
              FILING DATE: 11-AUG-1994
              APPLICATION NUMBER: 6-189272
              FILING DATE: 11-AUG-1994
        ATTORNEY/AGENT INFORMATION:
              NAME: CONLIN, DAVID G.
```

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REGISTRATION NUMBER: <Unknown>
          REFERENCE/DOCKET NUMBER: 45753 DIV3
      TELECOMMUNICATION INFORMATION:
          TELEPHONE: 617-439-4444
          TELEFAX: 617-439-4170
  INFORMATION FOR SEQ ID NO: 55:
      SEQUENCE CHARACTERISTICS:
          LENGTH: 789 base pairs
          TYPE: nucleic acid
          STRANDEDNESS: double
         TOPOLOGY: linear
      MOLECULE TYPE: cDNA
      SEQUENCE DESCRIPTION: SEQ ID NO: 55:
US-10-278-087A-55
 Query Match
                  59.2%;
                       Score 670.6; DB 15; Length 789;
 Best Local Similarity
                  90.6%; Pred. No. 5.4e-183;
                       0; Mismatches 74;
 Matches 715; Conservative
                                      Indels
                                              0; Gaps
                                                      0;
       271 GCTGACGTTCTGGTGACTGCTGCCTGCCGGCCAGCCTGCTGGTGGACATCACTGAG 330
Qy
          Db
        1 GCCGATGTGCTGGTGACAGCCATCTGCCTGCCGGCCAGTCTGCTGGTAGACATCACGGAA 60
       331 TCCTGGCTGTTCGGCCATGCCCTCTGCAAGGTCATCCCCTATCTACAGGCTGTGTCCGTG 390
Qу
          61 TCCTGGCTCTTTGGCCATGCCCTCTGCAAGGTCATCCCCTATCTACAGGCCGTGTCCGTG 120
Db
       391 TCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGTATGCCATCTGCCAC 450
Qу
          121 TCAGTGGTCGTGACTCTCAGCTCCATCGCCCTGGACCGCTGGTACGCCATCTGCCAC 180
Db
       451 CCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCCTGGGCATCTGGGCT 510
Qу
          181 CCGCTGTTGTTCAAGAGCACTGCCCGGCGCGCGCGCGCTCCATCCTCGGCATCTGGGCG 240
Db
       511 GTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCAGCAGTGTGCTGCCT 570
Qу
          Db
       241 GTGTCGCTGGCTGTCATGGTGCCTCAGGCTGCTGTCATGGAGTGTAGCAGCGTGCTGCCC 300
       571 GAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCTGGGCAGATGACCTC 630
Qy
          Db
       301 GAGCTGGCCAACCGCACCGCCTCCTGTCTGTCTGTGATGAGCGCTGGGCAGACGACCTG 360
       Qу
          Db
       691 ATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCCAGATCCCCGGCACC 750
Qу
          421 ATGGCCATGGCCTATTTCCAGATCTTCCGCAAGCTCTGGGGCCGCCAGATCCCCGGCACC 480
Db
       751 ACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGGACCTGGAGCAG 810
Qу
          Db
       481 ACCTCGGCCCTGGTGCGCAACTGGAAGCGGCCCTCAGACCAGCTGGACGACCAGGGCCAG 540
       811 GGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCCTTCCTGGCTGAAGTGAAGCAGATG 870
Qу
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Db
       541 GGCCTGAGCTCAGAGCCCCAGCCCCGGGCCCGCCCTTCCTGGCCGAGGTGAAACAGATG 600
       871 CGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCTGGTCTTCGCCCTCTGC 930
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           Db
       601 CGAGCCCGGAGGAAGACGCCAAGATGCTGATGGTGGTGCTGCTGTCTTCGCCCTCTGC 660
       931 TACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGGATGTTCCGCCAAGCC 990
Qy
           661 TACCTGCCCATCAGTGTCCTCAACGTCCTCAAGAGGGTCTTCGGGATGTTCCGCCAAGCC 720
Db
       Qy
           Db
       1051 AGCGCTGCC 1059
Qy
           781 AGCGCCGCC 789
Db
RESULT 13
US-10-282-717-1
; Sequence 1, Application US/10282717
; Publication No. US20030083466A1
 GENERAL INFORMATION:
  APPLICANT: YANAGISAWA, MASASHI
  TITLE OF INVENTION: cDNA CLONE MY1 THAT ENCODES A NOVEL
  TITLE OF INVENTION: HUMAN 7-TRANSMEMBRANE RECEPTOR
  FILE REFERENCE: GH50029D1C1
  CURRENT APPLICATION NUMBER: US/10/282,717
  CURRENT FILING DATE: 2002-10-28
  PRIOR APPLICATION NUMBER: 09/676,625
  PRIOR FILING DATE: 2000-10-02
  PRIOR APPLICATION NUMBER: 09/119,788
  PRIOR FILING DATE: 1998-07-21
  PRIOR APPLICATION NUMBER: 60/053,790
  PRIOR FILING DATE: 1997-07-25
  NUMBER OF SEQ ID NOS: 2
  SOFTWARE: FastSEQ for Windows Version 3.0
 SEQ ID NO 1
   LENGTH: 1633
   TYPE: DNA
   ORGANISM: HOMO SAPIENS
US-10-282-717-1
 Query Match
                    46.0%; Score 520.8; DB 15; Length 1633;
 Best Local Similarity 70.5%; Pred. No. 1e-139;
 Matches 712; Conservative
                          0; Mismatches 292; Indels
                                                      Gaps
                                                             1;
        80 ATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTGTACCCAAAACAGTATGAGT 139
Qy
           217 ACGACGAGGAATTCCTGCGGTACCTGTGGAGGGAATACCTGCACCCGAAAGAATATGAGT 276
Db
Qy
       140 GGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCCCTGGTGGGCAACACGCTGG 199
           Db
       277 GGGTCCTGATCGCCGGGTACATCGTGTTCGTCGTGGCTCTCATTGGGAACGTCCTGG 336
       200 TCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTCACCAACTACTTCATTGTCA 259
Qy
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Db	337		396
Qу	260	ACCTGTCCCTGGCTGACGTTCTGGTGACTGCTATCTGCCTGC	319
Db	397		456
Qу	320	ACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAGGTCATCCCCTATCTACAGG	379
Db	457		516
Qу	380	CTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGTATG	439
Db	517	CCGTGTCGGTGTCTGTCCTCACACTGAGCTGTATCGCCTTGGATCGGTGTATG	576
Qу	440	CCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCCTGG	499
Db	577	CAATCTGTCACCCTTTGATGTTTAAGAGCACAGCAAAGCGGGCCCGTAACAGCATTGTCA	636
Qу	500	GCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCAGCA	559
Db	637	TCATCTGGATTGTCTCCTGCATTATAATGATTCCTCAGGCCATCGTCATGGAGTGCAGCA	696
Qу	560	GTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCTGGG	619
Db	697	CCGTGTTCCCAGGCTTAGCCAATAAAACCACCCTCTTTACGGTGTGATGAGCGCTGGG	756
Qу	620	CAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTTATTGTCACCTACCT	679
Db	757	GTGGTGAAATTTATCCCAAGATGTACCACATCTGTTTCTTTC	816
Qy	680	CACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCCAGA	739
Db	817	CACTGTGTCTCATGGTGTTGGCTTATCTGCAAATATTTCGCAAACTCTGGTGTCGACAGA	876
Qy	740	TCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGG	799
Db .	877	TCCCTGGAACATCATCTGTAGTTCAGAGAAAATGGAAGCCCCTGCAGCCTGTTT	930
Qу	800	ACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCCCTTCCTGGCTGAAG	859
Db	931	CACAGCCTCGAGGGCCAGGACAGCCAACGAAGTCCCGGATGGGCGCTGTGGCGGCTGAAA	990
Qу	860	TGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCTGTCT	919
Db	931	TAAAGCAGATCCGAGCCAGAAGGAAAACAGCCCGGATGTTGATGGTTTTTGGTAT	1050
Qу	920	TCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGATGT	979
Db	1051	TTGCAATTTGCTATCTACCAATTAGCATCCTCAATGTGCTAAAGAGAGTATTTGGGATGT	1110
Qу	980	TCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCCACTGGCTGG	1039
Db	1111	TTGCCCATACTGAAGACAGAGACTGTGTATGCCTGGTTTACCTTTTCACACTGGCTTG	1170
Qу	1040	TGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGGA 1089	

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RESULT 14
US-10-225-567A-369
; Sequence 369, Application US/10225567A
; Publication No. US20030113798A1
; GENERAL INFORMATION:
  APPLICANT: LifeSpan Biosciences
  APPLICANT: Brown, Joseph P.
  APPLICANT: Burmer, Glenna C.
  APPLICANT: Roush, Christine L.
  TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED
RECEPTORS (GPCRS)
  FILE REFERENCE: 1920-4-4
  CURRENT APPLICATION NUMBER: US/10/225,567A
  CURRENT FILING DATE: 2001-12-19
  PRIOR APPLICATION NUMBER: 60/257,144
  PRIOR FILING DATE: 2000-12-19
  NUMBER OF SEO ID NOS: 2292
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 369
   LENGTH: 1843
   TYPE: DNA
   ORGANISM: Homo sapiens
US-10-225-567A-369
 Query Match
                    46.0%; Score 520.8; DB 15; Length 1843;
 Best Local Similarity 70.5%; Pred. No. 1e-139;
 Matches 712; Conservative 0; Mismatches 292; Indels
                                                  6; Gaps
                                                           1;
        80 ATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTGTACCCAAAACAGTATGAGT 139
Qу
           428 ACGACGAGGAATTCCTGCGGTACCTGTGGAGGGAATACCTGCACCCGAAAGAATATGAGT 487
Db
       140 GGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCCCTGGTGGGCAACACGCTGG 199
Qy
           488 GGGTCCTGATCGCCGGGTACATCATCGTGTTCGTCGTGGCTCTCATTGGGAACGTCCTGG 547
Db
       200 TCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTCACCAACTACTTCATTGTCA 259
Qу
           548 TTTGTGTGGCAGTGTGGAAGAACCACCACATGAGGACGGTAACCAACTACTTCATAGTCA 607
Db
       Qу
           608 ATCTTTCTCTGGCTGATGTGGTCGTGACCATCACCTGCCTTCCAGCCACACTGGTCGTGG 667
Db
       320 ACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAGGTCATCCCCTATCTACAGG 379
Qу
           Db
       668 ATATCACTGAGACCTGGTTTTTTGGACAGTCCCTTTGCAAAGTGATTCCTTATCTACAGA 727
Qу
       380 CTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGTATG 439
           Dh
       728 CCGTGTCGGTGTCTGTCTCTCACACTGAGCTGTATCGCCTTGGATCGGTGGTATG 787
       440 CCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCCTGG 499
Qν
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Db	788	CAATCTGTCACCCTTTGATGTTTAAGAGCACAGCAAAGCGGGCCCGTAACAGCATTGTCA	847
Qу	500	GCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCAGCA	559
Db	848		907
Qу	560	GTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCTGGG	619
Db	908	CCGTGTTCCCAGGCTTAGCCAATAAAACCACCCTCTTTACGGTGTGATGAGCGCTGGG	967
Qу	620	CAGATGACCTCTATCCCAAGATCTACCACAGTTGCTTCTTTATTGTCACCTACCT	679
Db	968	GTGGTGAAATTTATCCCAAGATGTACCACATCTGTTTCTTTC	1027
Qу	680	CACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCCAGA	739
Db	1028	CACTGTGTCTCATGGTGTTGGCTATCTGCAAATATTTCGCAAACTCTGGTGTCGACAGA	1087
QУ	740	TCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGG	799
Db	1088	TCCCTGGAACATCATCTGTAGTTCAGAGAAAATGGAAGCCCCTGCAGCCTGTTT	1141
Qу	800	ACCTGGAGCAGGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCCTTCCTGGCTGAAG	859
Db	1142	CACAGCCTCGAGGGCCAGGACAGCCAACGAAGTCCCGGATGAGCGCTGTGGCGGCTGAAA	1201
Qу	860	TGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCTGTCT	919
Db	1202	TAAAGCAGATCCGAGCCAGAAGGAAAACAGCCCGGATGTTGATGGTTGTGCTTTTGGTAT	1261
Qу	920	TCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGATGT	979
Db	1262	TTGCAATTTGCTATCTACCAATTAGCATCCTCAATGTGCTAAAGAGAGTATTTGGGATGT	1321
Qу	980	TCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCCACTGGCTGG	1039
Db	1322	TTGCCCATACTGAAGACAGAGAGACTGTGTATGCCTGGTTTACCTTTTCACACTGGCTTG	1381
Qу	1040	TGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGGA 1089	
Db	1382	TATATGCCAATAGTGCTGCGAATCCAATTATTATAATTTTCTCAGTGGA 1431	

US-09-826-509-550

- Sequence 550, Application US/09826509
 - ; Publication No. US20030204073A1
 - ; GENERAL INFORMATION:
 - ; APPLICANT: Lehmann-Bruinsma, Karin
 - ; APPLICANT: Liaw, Chen W.
 - ; APPLICANT: Lin, I-Lin
 - ; TITLE OF INVENTION: No. US20030204073A1-Endogenous, Constitutively Activated Known G
 - ; TITLE OF INVENTION: Protein-Coupled Receptors
 - ; FILE REFERENCE: AREN-207
 - ; CURRENT APPLICATION NUMBER: US/09/826,509
 - ; CURRENT FILING DATE: 2001-04-05

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PRIOR FILING DATE: 2000-04-07
  PRIOR APPLICATION NUMBER: 09/170,496
  PRIOR FILING DATE: 1998-10-13
  NUMBER OF SEO ID NOS: 589
  SOFTWARE: PatentIn Version 2.1
 SEQ ID NO 550
  LENGTH: 1335
  TYPE: DNA
  ORGANISM: Homo sapiens
US-09-826-509-550
                  45.5%; Score 516; DB 11; Length 1335;
 Query Match
 Best Local Similarity 70.2%; Pred. No. 2.3e-138;
 Matches 709; Conservative 0; Mismatches 295; Indels
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                                                      1;
       80 ATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTGTACCCAAAACAGTATGAGT 139
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          104 ACGACGAGGAATTCCTGCGGTACCTGTGGAGGGAATACCTGCACCCGAAAGAATATGAGT 163
Db
       140 GGGTCCTCATCGCAGCCTATGTGGCTGTGTTCGTCGTGGCCCTGGTGGGCAACACGCTGG 199
Qу
          164 GGGTCCTGATCGCCGGGTACATCATCGTGTTCGTCGTGGCTCTCATTGGGAACGTCCTGG 223
Db
       200 TCTGCCTGGCCGTGTGGCGGAACCACCACATGAGGACAGTCACCAACTACTTCATTGTCA 259
Qу
          224 TTTGTGTGGCAGTGTGGAAGAACCACCACATGAGGACGGTAACCAACTACTTCATAGTCA 283
Db
       Qy
          1 11 11 1111111 11 11 11 11 11
                                284 ATCTTTCTCTGGCTGATGTGCTCGTGACCATCACCTGCCTTCCAGCCACACTGGTCGTGG 343
Db
       320 ACATCACTGAGTCCTGGCTGTTCGGCCATGCCCTCTGCAAGGTCATCCCCTATCTACAGG 379
Qу
          344 ATATCACTGAGACCTGGTTTTTTGGACAGTCCCTTTGCAAAGTGATTCCTTATCTACAGA 403
Db
Qу
       380 CTGTGTCCGTGTCAGTGGCAGTGCTAACTCTCAGCTTCATCGCCCTGGACCGCTGGTATG 439
          404 CCGTGTCGGTGTCTGTCTCTCACACTGAGCTGTATCGCCTTGGATCGGTGGTATG 463
Db
       440 CCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCGGGCCCGTGGCTCCATCCTGG 499
Qy
          464 CAATCTGTCACCCTTTGATGTTTAAGAGCACAGCAAAGCGGGCCCGTAACAGCATTGTCA 523
Db
       500 GCATCTGGGCTGTCGCTGGCCATCATGGTGCCCCAGGCTGCAGTCATGGAATGCAGCA 559
Qy
          111111年 11111
                          Db
       524 TCATCTGGATTGTCTCCTGCATTATAATGATTCCTCAGGCCATCGTCATGGAGTGCAGCA 583
Qу
       560 GTGTGCTGCCTGAGCTAGCCAACCGCACACGGCTCTTCTCAGTCTGTGATGAACGCTGGG 619
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                                584 CCGTGTTCCCAGGCTTAGCCAATAAAACCACCTCTTTACGGTGTGATGAGCGCTGGG 643
Db
       Qу
           Db
       680 CACTGGGCCTCATGGCCATGGCCTATTTCCAGATATTCCGCAAGCTCTGGGGCCGCCAGA 739
Qy
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PRIOR APPLICATION NUMBER: 60/195,747

Db	704	CACTGTGTCTCATGGTGTTGGCTTATCTGCAAATATTTCGCAAACTCTGGTGTCGACAGA	763.
Qу	740	TCCCCGGCACCACCTCAGCACTGGTGCGGAACTGGAAGCGCCCCTCAGACCAGCTGGGGG	799
Db	764	TCCCTGGAACATCATCTGTAGTTCAGAGAAAATGGAAGCCCCTGCAGCCTGTTT	817
Qу	800	ACCTGGAGCAGGCCTGAGTGGAGAGCCCCAGCCCCGGGGCCGCCCTTCCTGGCTGAAG	859
Db	818	CACAGCCTCGAGGGCCAGGACGAACGAAGTCCCGGATGAGCGCTGTGGCGGCTGAAA	877
Qу	860	TGAAGCAGATGCGTGCACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGCTGCTCT	919
Db	878	TAAAGCAGATCCGAGCCAGAAGGAAAACAAAACGGATGTTGATGGTTGTGCTTTTGGTAT	937
Qу	920	TCGCCCTCTGCTACCTGCCCATCAGCGTCCTCAATGTCCTTAAGAGGGTGTTCGGGATGT	979
Db	938	TTGCAATTTGCTATCTACCAATTAGCATCCTCAATGTGCTAAAGAGAGTATTTGGGATGT	997
Qу	980	TCCGCCAAGCCAGTGACCGCGAAGCTGTCTACGCCTGCTTCACCTTCTCCCACTGGCTGG	1039
Db	998	TTGCCCATACTGAAGACAGAGAGACTGTGTATGCCTGGTTTACCTTTTCACACTGGCTTG	1057
Qy .	1040	TGTACGCCAACAGCGCTGCCAACCCCATCATCTACAACTTCCTCAGTGGA 1089	
Db	1058	TATATGCCAATAGTGCTGCGAATCCAATTATTTATAATTTTCTCAGTGGA 1107	1

Search completed: October 16, 2004, 03:40:45 Job time: 587.359 secs
